

UNIVERSITY OF KWAZULU NATAL

**Work-life balance: A case of female information and communication technology professionals
at a telecommunications company**

By

**Wiza Munyeka
217076380**

**A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy**

**School of Management, Information Technology and Governance
College of Law and Management Studies**

**Supervisor: Dr. Ashika Maharaj
2021**

PERMISSION TO SUBMIT



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

College of Law and Management Studies

Supervisors Permission to Submit Thesis/ Dissertation for Examination

Name: Wiza Munyeka		No: 217076380	
Title: Work-life balance: A case of female information and communication technology professionals at a telecommunications company			
Qualification: Doctor of Philosophy in HRM		School: Management, Information technology and Governance	
	Yes	No	
To the best of my knowledge, the thesis/dissertation is primarily the student's own work and the student has acknowledged all reference sources	x		
The English language is of a suitable standard for examination without going for professional editing.	x		
Turnitin Report	10%		
Comment if % is over 10%:			
I agree to the submission of this thesis/dissertation for examination	X		
Supervisors Name: Dr Maharaj			
Supervisors Signature:			
Date: 08/03/2021			
Co- Supervisors Name: NONE			
Co- Supervisors Signature: NONE			
Date:			

DECLARATION

I ... Wiza Munyeka.....declare that

- (i) The research reported in this dissertation/thesis, except where otherwise indicated, is my original research.
- (ii) This dissertation/thesis has not been submitted for any degree or examination at any other university.
- (iii) This dissertation/thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This dissertation/thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) their words have been re-written, but the general information attributed to them has been referenced;
 - b) where their exact words have been used, their writing have been placed inside quotation marks, and referenced.
- (v) Where I have reproduced a publication of which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by myself alone and have been fully referenced such publications.
- (vi) This dissertation/thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation/thesis and in the References sections.

Signature:

A black rectangular box redacting the signature of the author.

Date: 8th March, 2021.

ACKNOWLEDGEMENTS

People say the academic road is lonely, but I truly never felt alone, and this Ph.D. journey has been wide-ranging, winding, and requires one to be emotionally strong. It is humbling in many ways. Words cannot express the amount of gratitude I have for everyone that has shared this journey. I am overwhelmed with emotion from all the joy and happiness that has come with accomplishing this demanding task, which at first seemed impossible. My sincere appreciation and abundant gratitude go to all the participants at Telkom who shared their lives, voices, and experiences for this study. They were generous in sharing their paths, accomplishments, trials, and tribulations and their opinions, hopes, doubts, and reflections. I hope they continue to prosper in their journeys. I wish them all well and a good life journey onwards.

I want to thank the participants and Telkom as an organisation for opening their worlds to me and sharing their journeys and their insights and stories.

I want to thank my supervisor, Dr. Ashika Maharaj, for providing me the opportunity to realise my dream of obtaining a Ph.D. I cannot thank her enough for this and her patience, understanding, rigour, and continual reminder of ‘meaningful and simplicity.’

The University of Kwa-Zulu Natal for the financial, academic, and social support, which went a long way in supporting me while I conducted this study.

My dear Lerato, I cannot thank you enough for your support and your understanding when I decided to leave work to pursue further studies. Your caring, support, and comfort carried me through this journey.

To my mum, Gail, my siblings, Peter, and Lusungu, who always encouraged me to keep “my eye on the ball.”

My friends, Mr. Sam Mbewe, for your Zotero advice and Mr. Gibson Nyirenda.

My friend Dr. Tafadzwa Matiza with whom the idea to study for a Ph.D. was conceived.

My College administrator, Ms. Deborah Cunynghame, who through her meticulous way of doing things, assisted me in submitting a correct document.

My language editor Ms. Lucy Musiyiwa, for technical language editing for this thesis and finally, Dr. Hlanganipai Ngirande for your expert advice and support.

DEDICATION

This thesis is dedicated to:

- My mother Ms. Gail Munyeka, for her love, motivation and support,
- The loving memory of my late father, Charles Munyeka and my nephew Lukundo, and
- Finally, I would like to dedicate this study to female Information and Communications Technology professionals attempting to balance their multiple life roles. You are not unseen. Never stop doing the best you can with the resources you have. You are strong; you are doing a great job!

LIST OF ACRONYMS

South Africa	SA
Human Resource Information Services	HRIS
Statistical Software Package for Social Science	SPSS
Work-life balance	WLB
Life Course	LC
Border Theory	BT
Science Technology Engineering Mathematics	STEM
Information and Communication Technology	ICT
Information Technology	IT
United Arab Emirates	UAE
Kingdom of Saudi Arabia	KSA
Human Resources	HR
Internet of Things	IoT
United Nations Educational, Scientific, and Cultural Organisation	UNESCO
Science technology and innovation	STI
4 th Industrial Revolution	4IR
World Economic Forum	WEF
Women in Global Science & Technology	WISAT
Networked Readiness Index	NRI
Science, Engineering and Technology	SET
National Bureau of Statistics	NBS
Information Communication Technology Research and Development	ICT R&D
Joburg Centre for Software Engineering	JCSE
Statistics South Africa	StatsSA
Media, Information Communication Technology	MICT
International Business Machines	IBM
Sector Education and Training	SETA
Powers of South African Posts & Telecommunications	SAPT
Independent Broadcasting Authority	IBA
South African Broadcasting Corporation	SABC
Department of Communications	DOC
Independent Communications Authority of South Africa	ICASA

International Telecommunication Union	ITU
South African Institution of Civil Engineering	SAICE
Local area networks	LAN
Wide network areas	WAN
Work Life Conflict	WLC
Broad-Based Black Economic Empowerment	BBBEE
Basic Conditions of Employment Act 75 of 1997	BCEA
Labour Relations Act (LRA) 66 of 1995	LRA
Employment Equity Act 55 of 1998: 55	EEA
Skills Development Act 97 of 1998:	SDA
Exploratory Factor analysis	EFA
Kaiser-Meyer-Olkin	KMO
Measure of Sampling Adequacy	MSA
Special Operations Capable	SOC
Limited	Ltd

CLARIFICATION OF CONCEPTS

Experiences: The process of doing and seeing things happen to you (Merriam-Webster, 2016).

Female/ Woman: According to Merriam-Webster (2016), a female or woman relates to the sex that can produce young or characteristic of girls or women.

Information and Communications Technology (ICT): ICT, according to Chesley and Johnson (2010:1), refers to “technological platforms (e.g., the Internet) and devices (e.g., mobile phones, computers, personal digital assistants [PDA]) widely used by individuals to communicate with others as well as to gather and process information”. Reddi (2011) defines Information and Communications Technology as tools used to handle information in the form of goods, services, and applications in the production, storage, processing, distribution, and exchange of information.

IT Industry: IT is an abbreviated term for Information Technology. The IT Industry encompasses any communication device or application, referring to radio, television, cellular phones, computer and network hardware and software, and satellite systems for businesses (de Maar, 2019).

Male Dominant: This refers to an industry in which males are over-represented compared to females. The IT Industry is male dominant with only 69% of the working population made up by male employees (Independent Communications of South Africa, 2016).

The telecommunications sector: The telecommunications sector comprises fixed and mobile telecommunications services as well as the provision of Internet access (ICASA, 2016).

Work-Life Balance: Work-life balance is the state of equilibrium where any person is able to get satisfied with personal and professional life (Saleem, 2015).

ABSTRACT

An organisation's ability to operate effectively depends on how well it pays attention to its most important resource, its human resource. In South Africa, great strides have been made to redress past injustices which resulted in a skewed workforce. Statistics SA (2019) quarterly population reports estimate that females outnumber males in the South African population, but the workplace indicates the opposite. This study's primary objective was to explore the work-life balance experiences of female Information and Communications Technology (ICT) professionals in a telecommunication work setting.

The study's theoretical framework was the Life Course perspective by Giele and Elder (1998), and Border Theory by Clark (2000). To extract data required for analytical purposes a mixed methodology which utilises quantitative and qualitative methods was used. Using a purposive sampling technique, a sample of 50 female ICT professionals was chosen for the quantitative study. This was done using an online survey of **GoogleTM Drive Forms**, and analysed using the Statistical Package for Social Sciences 26. For the qualitative study, 16 semi-structured interviews were conducted using thematic analysis with the **Atlas.ti** version 8 analysis software's aid.

The quantitative data collection phase indicated that employees were aware of policies and programmes in place, addressing work-life balance at Telkom. Results from the qualitative phase exploring the respondents' experiences in terms of occupational interpretations of work, domestic interpretations of home, and interpretations of work-life synergy, revealed that professional females, regardless of their cultural background, experienced similar pressures and challenges. The study contributes to the body of knowledge as there has been a paucity of studies conducted on South African Information and Communications Technology female professionals. This study resulted in a work-life balance framework that links the Life Course perspective by Giele and Elder (1998) and Border Theory by Clark (2000), making a novel contribution to the empirical body of work-life balance.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
DEDICATION.....	iv
LIST OF ACRONYMS	v
CLARIFICATION OF CONCEPTS	vii
ABSTRACT.....	viii
Chapter 1: Introduction and Overview of the Study.....	1
1.1. Introduction.....	1
1.2. Background to the problem.....	2
1.2.1. Global background to the problem	3
1.2.2. Background to the problem: The South African context.....	5
1.2.2.1. Problem Statement	7
1.2.3. Telkom: A contextual background.....	9
1.3. Focus of the study	10
1.4. Research objectives of the study.....	11
1.5. Theoretical framework.....	12
1.5.1. Life Course (LC) Perspective (Giele & Elder, 1998)	12
1.5.2. Border Theory (BT) (Clark, 2000).....	14
1.5.3. The relevance of the Life Course Perspective (Giele & Elder, 1998) and Border Theory (BT) (Clark, 2000) to the current research problem	14
1.5.4. The Theoretical Framework of the study.....	15
1.6. Contribution of the study	18
1.7. Research methodology and design.....	18
1.8. Limitations	19
1.9. Overview of thesis structure	21

1.10. Conclusion	22
------------------------	----

Chapter 2: The Information and Communications Technology sector: A general overview23

2.1. Introduction.....	23
2.3. A Global Perspective of the Information and Communications Technology Sector.....	25
2.3.1 Europe.....	26
2.3.2. South America	27
2.3.3. Middle East	28
2.3.4. Asia	30
2.3.5. Africa	31
2.4. Profile of the South African Information and Communications Technology work force	33
2.4.1. Employment in the South African Information and Communications Technology sector	36
2.4.2. The South African Telecommunications Industry	38
2.4.3. Employment in the South African Telecommunications Sector.....	40
2.5. Challenges or barriers women face in the South African Information and Communications Technology sector.....	41
2.6. Conclusion	45

Chapter 3: Theoretical foundation of the study..... 46

3.1. Introduction.....	46
3.2. Theoretical foundations	46
3.2.1. The Life Course Perspective (Giele & Elder, 1998).....	46
3.2.2. Central Tenets of the Life Course Perspective (Giele & Elder, 1998)	47

3.3. Limitations and Strengths of the Life Course Perspective (Giele & Elder, 1998)	49
3.4. Gender differences in life course experiences	50
3.5. The Border Theory (BT) (Clark, 2000)	52
3.5.1. Border permeability and Border flexibility of work-life balance	53
3.6. Central Tenets of the Border Theory (Clark, 2000).....	54
3.7. Limitations and Strengths of the Border Theory (Clark, 2000).....	54
3.8. The Border Theory (Clark, 2000) and work-family balance	56
3.9. The Border Theory (Clark, 2000) in the 21 st Century	57
3.10. The rationale of the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) for this study	58
3.11. Conclusion	59
 Chapter 4: Work-life balance: A literature review	 61
4.1. Introduction.....	61
4.2. A review of work-life balance	62
4.3. Current theories to work-life balance	64
4.4. Types of work-life balance	65
4.4.1. Flexible work schedules.....	65
4.5. Factors that contribute to successful work-life balance.....	67
4.5.1. The dual career woman and role-conflict	67
4.5.2. Organisational culture	67
4.5.3. Role and time prioritisation of ICT employees.....	68
4.5.4. Organisational and co-worker social support in achieving work-life balance.....	69
4.5.5. Organisational commitment.....	70

4.6. Good and poor work and home-life balance.....	71
4.6.1. Care for aging parents and other dependents	72
4.6.2. Women’s roles as caregivers	73
4.6.3. Single and childless workers.....	74
4.6.4. Working mothers	75
4.7. The importance of maintaining work-life balance.....	76
4.8. Global studies of work-life balance of women in Information and Communication Technology	77
4.9. International legislation on work-life balance	84
4.10. South African Legislation on work-life balance.....	85
4.11. Work-life balance policy and programme at Telkom.....	88
4.11.1. Theme 1: Work-place initiatives at Telkom	89
4.11.1.1. Sub-theme 1: Workweek.....	89
4.11.1.2. Sub-theme 2: Flexible Working Hours	90
4.11.1.3. Sub-theme 3: Reduced Workweek.....	91
4.11.1.4. Sub-theme 4: Hours of Work.....	91
4.11.1.5. Sub-theme 5: Meal Intervals.....	92
4.11.1.6. Sub-theme 6: Employee Assistance Programme	92
4.11.1.7. Sub-theme 7: Programme and wellness Programme	92
4.11.2. Theme 2: Telecommuting arrangements at Telkom	93
4.11.2.1. Sub-theme 1: Working from home or working closer to home	93
4.11.2.2. Sub-theme 2: Shift work	94
4.11.2.3. Sub-theme 3: Changing Shift Schedules.....	95

4.11.2.4. Overtime	96
4.11.2.5. Call-out (also referred to as <i>T-421</i>).....	96
4.11.2.6. Sub-theme 6: Flexible working and care for elderly persons	96
4.11.2.7. Sub-theme 7: Flexitime.....	97
4.11.2.8. Sub-theme 8: Telework.....	98
4.11.3. Theme 3: Work and leave arrangements at Telkom	99
4.11.3.1. Sub-theme 1: Over time	99
4.11.3.2. Sub-theme 2: Work on Sundays	99
4.11.3.3. Sub-theme 3: Work on Public Holidays	100
4.11.3.4. Sub-theme 4: Overtime for Management and Specialist Levels	100
4.11.3.5. Sub-theme 5: Educational Leave	100
4.11.3.6. Sub-theme 6: Exceptional Leave	101
4.11.3.7. Sub-theme 7: Family Responsibility Leave.....	102
4.11.3.8. Sub-theme 8: Bereavement Leave	102
4.11.3.9. Sub-theme 9: Educational Leave	103
4.11.3.10. Sub-theme 10: Medical, Dental, and Related Leave.....	103
4.12. Conclusion	104
Chapter 5: Research methodology	105
5.1. Introduction.....	105
5.2. Research problem.....	105
5.3. Focus of the research	106
5.3.1. Research aims	106

5.3.2. Research objectives.....	106
5.4. Research design	107
5.4.1. Rational and justification for use of the sequential explanatory design using a mixed-method approach.....	108
5.4.2. Research Paradigm.....	109
5.4.2.1. Explanatory studies.....	109
5.4.2.2. Case study research.....	110
5.4.3. Triangulation.....	111
5.4.4. Study site.....	114
5.4.5. Target population.....	115
5.4.6. An overview of the Research methodology	115
5.5. Stage 1: Secondary data collection	117
5.6. Stage 2: Quantitative study	118
5.6.1. Sample and sampling technique.....	119
5.6.2. Sample and sampling techniques in the quantitative stage.....	119
5.6.3. Purposive sampling.....	120
5.6.4. Data collection method: Design of the questionnaire	120
5.6.4.1. Pilot study	123
5.6.4.2. Review of Assessment instrument by experts in the field	123
5.6.4.3. Number of scale points on Likert scale items	124
5.6.4.4. The “work-related” and “life-related” scales of “The Work-Life Balance Study Employee On-Line Survey”	125
5.6.4.4.1. Reliability of the “work-related” and “life-related” scales	125

5.6.4.4.2. Validity of the “work-related” and “life-related” scales.....	126
5.6.5. Data Analysis	129
5.6.5.1. Descriptive statistics	130
5.6.5.1.1. Frequencies	131
5.6.5.1.2. Measures of Central tendency and measures of Dispersion/variability	131
5.6.5.2. Inferential statistics	132
5.6.5.2.1. T-test	132
5.6.5.2.2. The Analysis of Variance (ANOVA)	132
5.6.5.2.3. Pearson Product-moment Correlation Coefficient.....	132
5.7. Stage 3: Qualitative study	133
5.7.1. Sample and Sampling technique	134
5.7.2. Data collection method	135
5.7.2.1. Preparing for data collection.....	135
5.7.2.2. Data collection method: Semi- structured Interviews.....	136
5.7.3. Data analysis	139
5.7.4. Reliability and validity.....	142
5.8. Ethical considerations	143
5.9. Delimitations.....	144
5.10. Conclusion	145

Chapter 6: Stage 1: Secondary data collection.....	146
6.1. Introduction.....	146
6.2.1. Telkom policy usage of work-place initiatives at Telkom.....	147
6.2.1.1. Workweek usage over nine months of 2018.....	149
6.2.1.2. Flexible work hours' usage over nine months of 2018.....	149
6.2.1.3. Reduced workweek usage over nine months of 2018.....	150
6.2.1.4. Hours of work usage over nine months of 2018	151
6.2.1.5. Meal intervals usage over nine months of 2018	153
6.2.2. Usage of Telkom policy on telecommuting arrangements at Telkom.....	154
6.2.2.1. Working from or closer to home over nine months of 2018.....	155
6.2.2.2. Shift work usage over nine months of 2018	157
6.2.2.3. Changing Shift Schedules usage over nine months of 2018.....	158
6.2.2.4. Overtime usage over nine months of 2018	160
6.2.2.5. Call-out (also referred to as <i>T-421</i>) usage over nine months of 2018	161
6.2.3. Telkom policy usage of work and leave arrangements at Telkom	162
6.2.3.1. Work on Sundays usage over nine months of 2018.....	163
6.2.3.2. Work on Public Holidays usage over nine months of 2018.....	164
6.2.3.3. Usage overtime for Management and Specialist Levels over nine months of 2018.....	165
6.3. The usage of work-place initiatives at Telkom over nine months	166
6.3.1. The use of the Employee Assistance Programmes over nine months	167
6.3.2. The use of the wellness programme over nine months.....	169
6.4. The usage of <i>Telkom Touch</i> and the telecommuting arrangements at Telkom over nine months.....	170
6.4.1. Flexible schedules and Telkom employees as carers.....	171
6.4.2. The usage of Flexitime over nine months.....	172
6.4.3. The usage of telework over nine months	174
6.5. The usage of work and leave arrangements of the <i>Telkom Touch</i> at Telkom over nine months	175

6.5.1. Educational Leave usage over nine months.....	176
6.5.2. Family Responsibility Leave usage over nine months	177
6.5.3. Exceptional Leave usage over nine months.....	179
6.5.4. Medical, Dental and Related Leave usage over nine months	180
6.5.5. Bereavement Leave usage over nine months.....	181
6.6. Conclusion	183
Chapter 7: Stage 2: Quantitative data collection	184
7.1. Introduction.....	184
7.2. Response rate	184
7.4. Instrument development of the on-line web based <i>Google™ Drive Forms</i> Survey	185
7.4.1. Item generation	185
7.4.2. Pilot study	186
7.4.3. Expert content analysis	186
7.4.4. Psychometric analysis.....	187
7.4.4.1. Section A: Demographics	187
7.4.4.3. Section B: Work-related scale	188
7.4.4.4. Section C: Life-related scale.....	189
7.5. Reliability and validity.....	190
7.5.1. The Work-related scale	190
7.5.2. The Life-related scale	192
7.6. Descriptive statistics	195
7.6.1 Demographic profile of the female ICT professional respondents.....	195
7.6.1.1. Age of female ICT professional respondents.....	195
7.6.1.2. Race of female ICT professional respondents	196
7.6.1.3. Marital status of female ICT professional respondents	196
7.6.1.4. Spouse/ partner’s employment status.....	197
7.6.1.5. Educational level.....	198
7.6.1.6. Work departments.....	199
7.6.1.7. Length of Information Communication and Technology career	200
7.6.1.8. Length of working hours.....	200
7.6.1.9. Children under the age of 18.....	201
7.6.1.10. Job profiles of respondents	201

7.7. Results of Findings: Descriptive Statistics	202
7.7.1. Objective 2: To evaluate the extent to which all employees are aware of policies and programmes that are in place which address work-life balance at the telecommunications company.....	202
7.7.1.1. Awareness.....	204
7.7.1.2. Existence of work-life balance and adherence.....	204
7.7.1.2. Usage of available family-related benefits	204
7.7.1.3. Policy establishment, documentation and communication.....	205
The next section looks at the last component which is the policy interference.....	195
7.7.1.4. Policy interference	195
7.7.2. Objective 3: To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company	196
7.7.2.1. Gender stereotypes.....	198
7.7.2.2. Flexibility	200
7.7.2.3. Dependent adults /children-related tasks	201
7.7.2.4. Work/home interference	202
7.7.2.5. Time management.....	204
7.7.2.6. Sense of accomplishment.....	206
7.7.2.7. Skills acquisition.....	207
7.8. Results of findings using inferential statistics	208
7.8.1. Objective 2: To evaluate the extent to which all employees are aware of policies and programmes that are in place which address work-life balance at the telecommunications company.....	209
7.8.1.1. Age and Awareness.....	209
7.8.1.2. Racial grouping and awareness of Telkom work-life balance policies	210
7.8.1.3. Marital status and awareness of Telkom work-life balance policies	211
7.8.1.4. Number of children under the age of 18 living at home and awareness of Telkom work-life balance policies.....	211
7.8.1.5. Partner/ spouse's employment status, educational level, number of years worked for in the organisation, working hours of Telkom work-life balance policies	212
7.8.2. Objective 3: To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company	213

7.8.2.1. Age and the Work-Life-related scale	213
7.8.2.2. Racial grouping and the Work-Life-related scale	215
7.8.2.3. Marital status and the Work-Life-related scale.....	217
7.8.2.4. Number of children under the age of 18 living at home and the Work-Life-related scale ...	219
7.8.2.5 Partner/ spouse's employment status and the Work-Life-related scale	222
7.8.2.6. Educational level and the Work-Life-related scale.....	223
7.8.2.7. Number of years worked in the organisation and the Work-Life-related scale.....	225
7.8.2.8. Working hours and the Work-Life-related scale	227
7.8.2.9. Work departments and the Work-Life-related scale	229
7.9. Conclusion	231
 Chapter 8: Presentation of Results: Qualitative Stage	 232
8.1. Introduction.....	232
8.2. Research objectives of the study.....	232
8.3. Response rate leading to the interview schedule	233
8.4. Stage 3: Qualitative study	233
8.5. Theme 1: Occupational interpretations of work	234
8.5.1. Sub-theme 1: Career females' views of work life	235
8.5.2. Sub-theme 2: Career females' views of career retention in the ICT field	236
8.5.3. Sub-theme 3: Career females' perceptions of workplace conduct.....	238
8.6. Theme 2: Domestic interpretations of home.....	239
8.6.1. Sub-theme 1: Career females' views of home life.....	240
8.6.2. Sub-theme 2: Career females' domestic activities.....	241
8.6.3. Sub theme 3: Career females' time allocations to domestic work.....	242
8.6.4. Sub-theme 4: Career females' different home roles and time management.....	245
8.6.5. Sub-theme 5: Career females' lives regarding the use of ICT and Internet.....	247
8.7. Theme 3: Interpretations of work-life synergy	248
8.7.1. Sub-theme 1: Career females' perceptions of work-life balance at Telkom	249
8.7.2. Sub-theme 2: Career females' perceptions of work-life balance on the management of career and personal life	250
8.7.3. Sub-theme 3: Career females' perceptions of ideal/ perfect balance at Telkom	251
8.7.4. Sub-theme 4: Career females' work-life integration at Telkom	251
8.7.5. Sub-theme 5: Career females' experiences of work-life integration at Telkom.....	252

8.7.6. Sub-theme 6: Career females' outlook on work-life and management of flexible labour time arrangements at Telkom.....	254
8.8. Conclusion	254
Chapter 9: Discussion of Results	255
9.1. Introduction.....	255
9.2. Theme 1: The awareness and utilisation of Telkom's work-life balance organisational policies and practices by female ICT professionals.....	256
9.2.1. The awareness and utilisation of working timetables at Telkom: Workweek	257
9.2.2. The awareness and utilisation of working timetables at Telkom: Flexible work hours' option	257
9.2.3. The awareness and utilisation of working timetables at Telkom: Reduced workweek option	260
9.2.4. The awareness and utilisation of working timetables at Telkom: Hours of work	261
9.2.5. The awareness and utilisation of working timetables at Telkom: Meal intervals.....	261
9.2.6. The use of the working element at Telkom: Working from home or closer to home.....	262
9.2.7. The use of the working element at Telkom: Shift work and changing shift schedules option	263
9.2.8. The use of the working element at Telkom: Overtime	264
9.2.9. The use of the working element at Telkom: Call-out (also referred to as <i>T-421</i>) system	265
9.2.10. Work on non-standard days/times at Telkom: Sundays	265
9.2.11. Work on non-standard days/times at Telkom: Public Holidays	266
9.2.12. Work on non-standard days/times at Telkom: Overtime for Management and Specialist Levels.....	267
The first aspect is the utilisation of leave options at Telkom: Educational Leave.	268
9.2.13. Utilisation of leave options at Telkom: Educational Leave.....	268
9.2.14. Utilisation of leave options at Telkom: Exceptional Leave	269
9.2.15. Utilisation of leave options at Telkom: Family Responsibility Leave	270
9.2.16. Utilisation of leave options at Telkom: Bereavement Leave.....	271
9.2.17. Utilisation of leave options at Telkom: Educational Leave.....	271
9.2.18. Utilisation of leave options at Telkom: Medical, Dental, and Related Leave	272
9.2.19. The utilisation of Work practices at Telkom: Flexible working (carers of parents and adults in need of care).....	273

9.2.20. Utilisation of Work practices at Telkom: Flexitime	274
The next section looks at the utilisation of Work practices at Telkom: Telework.	274
9.2.21. Utilisation of Work practices at Telkom: Telework	274
9.2.22. Utilisation of work-based health and wellness services at Telkom: Employee Assistance Programme.....	275
9.2.23. Utilisation of work-based health and wellness services at Telkom: Wellness Programme...	276
9.3. Theme 2: Female ICT professionals' interpretations, challenges and benefits of work-life	276
9.3.1. Career females' interpretations, challenges, benefits and views of work-life	277
9.3.2. Career females' interpretations, challenges and benefits of retention in the ICT field	282
9.3.3. Career females' interpretations, challenges and opportunities of workplace conduct.....	288
9.3.4. Career females' interpretations, challenges and benefits of home life	289
9.3.5. Career females' interpretations, challenges and benefits of domestic activities and time allocations to domestic work	292
9.3.6. Career females' interpretations, challenges and benefits as a result of ICT and Internet usage	294
9.4. Theme 3: Female ICT professionals' experiences and perceptions of work-life balance	296
9.4.1. Career females' perceptions of work-life balance at Telkom	296
9.4.2. Career females' perceptions of work-life balance on management of career with personal life	297
9.4.3. Career females' perceptions of ideal balance in terms of work-life integration at Telkom	300
9.4.4. Career females' experiences and perceptions of short-term or long-term possibility of work-life integration at Telkom.....	302
9.5. Conclusion	303
Chapter 10: Conclusions and Recommendations	304
10.1 Introduction.....	304
10.2 Conclusions.....	304
10.2.1. Aim 1: To explore the awareness of existing work-life balance programmes in the telecommunications organisation.....	304
10.2.1.1 Research objectives.....	305
10.2.2. Aim 2: To investigate the work-life balance experiences of female ICT professionals in the telecommunications organisation.....	307
10.2.2.1 Research objective	307

10.2.3. Aim 3: To evaluate the experiences of female ICT professionals that inform their decisions to leave or stay with the telecommunications organisation	308
10.2.3.1. Research objective	309
10.3 Recommendations.....	310
10.3.1 Recommendations to Telkom policy makers and organisational stakeholders	310
10.3.2 Recommendations to the individual ICT female professional.....	311
10.4. A work-life balance framework	311
10.4.1. Aim 4: To develop a framework that may help with different work-life balance aspects in the South African context	312
10.4.2. Research objective	312
10.4.3. Conceptualisation of the resulting work-life balance framework.....	314
10.4.4. Theoretical bases.....	314
10.4.5. Work life balance definition elements	314
10.4.6. Work balance implications	315
10.4.7. Policy tools.....	315
10.4.8. Impact of the framework.....	315
10.4.9. Limitations of the framework	315
10.5. Original contribution of the study	316
10.5.1. Theoretical contributions	317
10.5.2. Managerial Contributions	317
10.6. Directions for future research	318
10.7. Conclusion	318
11. References.....	319
APPENDIX A: GATE KEEPERS LETTER.....	368
APPENDIX B1: ETHICAL CLEARANCE LETTER.....	369
APPENDIX B2: AMENDED ETHICAL CLEARANCE LETTER.....	370
APPENDIX C PERMISSION TO CONDUCT RESEARCH INFORMED CONSENT FORM: QUESTIONNAIRE	371
APPENDIX D: AMENDED FINAL WORK-LIFE BALANCE STUDY EMPLOYEE ON-LINE SURVEY	379
APPENDIX E: NON-SIGNIFICANT FINDINGS	384

APPENDIX F: INTERVIEW INFORMED CONSENT FORM AND INTERVIEW SCHEDULE.....	386
APPENDIX G: LETTER FROM THE EDITOR	389
APPENDIX H: TURNITIN REPORT.....	390

LIST OF TABLES

Table 1. 1: Stages of the study linking the aims and objectives	11
Table 2. 1: Telecommunications legislation in South Africa	39
Table 4. 1: An overview of global studies of work-life balance of women in Information and Communication Technology.....	79
Table 4. 2: How the three main themes fit with Telkom’s work-life balance policy and programme	88
Table 5. 1: How the different objectives fit with the different aims.....	107
Table 5. 2: Population distribution at Telkom Pretoria Headquarters of full-time employees as of October 2018.....	115
Table 5. 3: Section A: Demographic factors in questionnaire	122
Table 5. 4: Section B and C questions of “The Work-Life Balance Study Employee On-line Survey”	123
Table 5. 5: The “work-related” and “life-related” scales.....	125
Table 5. 6: Cronbach’s alpha values categorisation.....	126
Table 5. 7: Types of validity	127
Table 5. 8: Types of measurement scales	130
Table 5. 9: Correlation coefficient interpretation guidelines	133
Table 5. 10: Participants in the interview	133
Table 5. 11: List of interviews conducted with female ICT professionals	135
Table 5. 12: Alignment of research objectives to the interview questions	137
Table 6. 1: Measure of Central Tendency and Dispersion of workplace initiatives at Telkom for nine months of 2018	147
Table 6. 2: Measure of Central Tendency and Dispersion of the telecommuting arrangements at Telkom for nine months of 2018	155
Table 6. 3: Measure of Central Tendency and Dispersion of work and leave arrangements at Telkom for nine months of 2018.....	163
Table 6. 4: Measure of Central Tendency and Dispersion of the usage of work-based health and wellness services at Telkom.....	167

Table 6. 5: Measure of Central of Tendency and Dispersion of telecommuting arrangement at Telkom	171
Table 6. 6: Measure of Central Tendency and Dispersion of work and leave arrangements at Telkom for nine months of 2018.....	176
Table 7. 1: Original factors and their pre-coded items on demographics.....	187
Table 7. 2: Original statements for components on demographics.....	188
Table 7. 3: Original factors and their pre-coded items on the work-related scale.....	188
Table 7. 4: Original statements for the items of the work-related scale	189
Table 7. 5: Original factors and their pre-coded items on the life-related scale.....	189
Table 7. 6: Reliability statistics for the work-related scale.....	191
Table 7. 7: Factor analysis results of the Work-related scale using KMO and Bartlett's Test.....	191
Table 7. 8: Rotated Component Matrix for the Work-related scale	192
Table 7. 9: Reliability statistics for the Life-related scale	193
Table 7. 10: Factor Analysis results of the Work-related scale KMO and Bartlett's Test	193
Table 7. 11: Rotated Component Matrix for the Life-related scale	194
Table 7. 12: Age of the female ICT professional respondents	195
Table 7. 13: Distribution of highest academic qualifications of female ICT professional respondents	198
Table 7. 14: Distribution of female Information and Communications Technology professionals' career.....	200
Table 7. 15: Distribution of length of working hours for female ICT professional residents	200
Table 7. 16: Distribution of number of children of female ICT professional respondents <18 years old	201
Table 7. 17: Distribution of job profiles held by female ICT professional respondents	202
Table 7. 18: The work-life balance factors used for the awareness of Telkom's work-life balance policy	203
Table 7. 19: Measure of Central Tendency and Dispersion for awareness of Telkom's policy.....	203
Table 7. 20: The work-life balance factors used for challenges female ICT professionals.....	Error!
Bookmark not defined.	
Table 7. 21: Measure Central Tendency and Dispersion for challenges ICT professionals face	198
Table 7. 22: ANOVA: Awareness and categories of Age	209
Table 7. 23: ANOVA: Awareness and Racial group.....	210

Table 7. 24: ANOVA: Section B: Work-related scale and categories of marital status.....	211
Table 7. 25: Age and number of children under the age of 18 living at home	212
Table 7. 26: ANOVA: Age and the Work-life-related scale	214
Table 7. 27: ANOVA: Racial grouping and the Work-Life-related scale	216
Table 7. 28: ANOVA: Marital status and the Work-Life-related scale	218
Table 7. 29: Number of children under the age of 18 living at home and the Work-Life-related scale	220
Table 7. 30: Correlations of the Work-Life-related scale and partner/spouse's employment.....	222
Table 7. 31: Correlations of the Work-Life-related scale and Educational level	224
Table 7. 32: Correlations of the Work-Life-related scale and the number of years worked in an organisation.....	226
Table 7. 33: Correlations of the Work-Life-related scale and Working hours	228
Table 7. 34: Correlations of the Work-Life-related scale and Work departments.....	230
 Table 8. 1: Participants in the in-depth semi-structured interviews.....	 233
Table 8. 2: Main themes and sub-themes according the qualitative study	234
Table 8. 3: Career females' views of work-life	235
Table 8. 4: Career females' views on career retention in the ICT field.....	237
Table 8. 5: Career females' perceptions of workplace conduct.....	238
Table 8. 6: Domestic interpretations of home.....	240
Table 8. 7: Participants' time allocations to domestic work.....	243
Table 8. 8: Career females' different home roles	246
Table 8. 9: Careers females' lives regarding the use of ICT and internet	247
Table 8. 10: Career females' perceptions of work-life balance at Telkom.....	249
Table 8. 11: Career females' perceptions of work-life balance on management of career and personal life	250
Table 8. 12: Career females' experiences of work-life integration at Telkom	253
 Table 9. 1: The themes identified to aid the study's discussion	 255

LIST OF FIGURES

Figure 1. 1: Life Course Perspective (Giele & Elder, 1998: 145)	13
Figure 1. 2: Border Theory (Clark, 2000: 754).....	15
Figure 1. 3: The Border Theory (Clark, 2000) and Life Course Perspective (Giele & Elder, 1998) as the theoretical framework of the study	16
Figure 2. 1: Employment in the Information and Communications Technology Sector.....	37
Figure 2. 2: Persons employed in the Telecommunications Sector, by gender, as of the 30th September 2015.....	40
Figure 3. 1: Life Course Perspective (Giele & Elder, 1998)	48
Figure 3. 2: The Border Theory (Clark, 2000).....	52
Figure 5. 1: Types of Triangulation used in the research design of this study	114
Figure 5. 2: The mixed methods research methodology adopted for the study	117
Figure 5. 3: Research design of Stage 1 of the study	118
Figure 5. 4: Research design of Stage 2 of the study	121
Figure 5. 5: Research design for Stage 3 of the study	134
Figure 5. 6: Interview schedule for female ICT professionals at Telkom	138
Figure 6. 1: Frequency distribution of workweek observance.....	149
Figure 6. 2: Frequency distribution of flexible working hours.....	150
Figure 6. 3: Frequency distribution of reduced workweek	151
Figure 6. 4: Frequency distribution of hours of work.....	152
Figure 6. 5: Frequency distribution of meal intervals.....	154
Figure 6. 6: Frequency distribution of working from or closer to home	156
Figure 6. 7: Frequency distribution of shift hours	158
Figure 6. 8: Frequency distribution of changing shift schedules.....	159
Figure 6. 9: Frequency distribution of overtime	161
Figure 6. 10: Frequency distribution of the Call-out (also referred to as <i>T-421</i>).....	162
Figure 6. 11: Frequency distribution of work on Sundays.....	164

Figure 6. 12: Frequency distribution of work on Public Holidays	165
Figure 6. 13: Frequency of distribution of the usage of Employee Assistance Programme.....	169
Figure 6. 14: Frequency distribution of the usage of the Wellness Programme.....	170
Figure 6. 15: Frequency distribution of the flexible schedules and Telkom employees as carers	172
Figure 6. 16: Frequency distribution of flexitime	173
Figure 6. 17: Frequency distribution of telework	175
Figure 6. 18: Frequency distribution of Educational Leave	177
Figure 6. 19: Frequency distribution of Family Responsibility Leave	179
Figure 6. 20: Frequency distribution of Exceptional Leave	180
Figure 6. 21: Frequency distribution of Medical, Dental and Related Leave.....	181
Figure 6. 22: Frequency distribution of Bereavement Leave	182
Figure 7. 1: Distribution of female ICT professionals in the sample according to race	196
Figure 7. 2: Distribution of female ICT professionals in the sample according to marital status	197
Figure 7. 3: Distribution of spouse/partner's in the sample according to employment status	198
Figure 7. 4: Female ICT professionals' distribution according to Departments.....	199
Figure 7. 5: Existence of work-life balance and adherence	204
Figure 7. 6: Usage of available family-related benefits by employees.....	205
Figure 7. 7: Work-life balance policy establishment and communication	195
Figure 7. 8: Work-life balance policy and policy interference	195
Figure 7. 9: Challenges related to gender stereotypes	199
Figure 7. 10: Challenges related to flexibility	200
Figure 7. 11: Challenges related to dependent adults/children-related tasks.....	202
Figure 7. 12: Challenges related to work/home interference	204
Figure 7. 13: Frequency of the three questions on challenges related to time management	205
Figure 7. 14: Challenges related to sense of accomplishment	207
Figure 7. 15: Challenges related to skills acquisition	208
Figure 10. 1: The resulting work-life balance Framework	313

Chapter 1

Introduction and Overview of the Study

1.1. Introduction

Global social change has seen a dramatic increase in the number of women entering the workplace, and this has also been the case in South Africa since the end of apartheid in 1994. During apartheid, only a small minority gained admission to higher education. To exacerbate the situation, technological and professional careers were made less accessible by gaps in black schools' mathematics and science curricula. Millions of adult South Africans were purposely under-equipped for revolutionising the industrial and commercial economy of South Africa, with women being most affected. Jacobs and Schain (2009) opine that achieving professional status may be more difficult for women than men. In South Africa, Mahasha (2016:14) notes that "many South African women continue to experience marginalisation and discrimination in the workplace, in their homes, and within their communities." In male-dominated sectors such as Science Technology Engineering Mathematics (STEM), diversity issues are not adequately addressed, and as South African society is changing, more women are getting a career but still have to continue to care for their children and husbands.

Julka and Mathur (2017:74) are of the view that "women are getting into jobs, and they continue to work even after marriage. A married woman has more responsibility than a man in taking care of young children and family." A previous investigation led in 2013 by Delina and Raya found that, all through the world, the part of working females had changed because of monetary conditions and social demands. The study found that this brought about a situation in which working women had colossal pressure to build up a vocation as robust as their male colleagues while supporting dynamic commitment close to home life. Finnemore and Cunningham (1995) argued that the South African female labour force grew because of equity legislation and improved access to education and work opportunities made available after apartheid. Subsequent studies by Mosert (2009), Van den Berg and Van Zyl (2008), Franks, Schurink, and Fourie (2006) also support the sentiments by Finnemore and Cunningham (1995).

After extensively reviewing related literature, there appears to be a paucity of studies on the work-life balance experiences of female Information and Communications Technology professionals in the Telecommunications sector. While there is increasing research in the challenges in the Science, Technology, Engineering and Mathematics field, these have focused on one type of study that is qualitative, or comparative studies, but none have utilised a mixed-

methods approach to gain richer insights into the challenges. Therefore, diversity issues in this sector do not receive much attention. This study explores the experience of female Information and Communications Technology (ICT) professionals in the South African telecommunications industry to fill the niche of the lack of diversity in the ICT sector. Next, the problem is described in its context.

1.2. Background to the problem

The 21st century has changed the world of work, and as a result many organisations are facing vast challenges. In this new environment employers are expecting more from their staff, and increasingly putting additional pressure on them to achieve more significant results. Meantime in addition to the work, the employees are dealing with numerous competing responsibilities such as care for children, housework, spouse, and elderly parents, which puts a lot of stress on the individuals, families, and the communities in which they reside. Work-life balance is about forming and preserving supportive and healthy work environments, enabling employees to balance work and personal responsibilities, thus strengthen employee loyalty and productivity. Maintaining work-life balance is crucial for their well-being and relationships, as it can also improve efficiency in their work performance. In today's fast-paced, technologically advanced world, achieving work-life balance is becoming more and more challenging.

Leonard and Cairnes (2019) assert that technology is changing every day, and so are international standards. The issue of globalisation is forcing organisations to function at an international level to meet international standards. In addition, Das and Karthikeyan (2015) opine that organisations are looking at ways in which they can increase employee morale, profitability, retain employees with valuable knowledge of the company, and adhere to work trends. Employees and employers are aware of the challenges of work and life in today's fast-paced society.

In South Africa, changes in the political and socio-economic environment have also brought new workplace challenges. No organisations are immune to political and socio-economic changes, regardless of the type, size, and structure. Although new opportunities are formed due to these changes, employers and employees cannot ignore the challenges that come with them. In trying to manage all these changes, employees' maintenance of the work-life balance is often challenged. If organisations mismanage the work-life balance processes and procedures, this can have adverse effects on employee performance outcomes. Thus, central to this study is the work-life balance experiences of female Information and Communication Technology (ICT) professionals. For the current study, the focus is on a male-dominated occupation, namely

Information and Technology Communications (ICT), with special attention on female employees since the number of women entering such professions is increasing.

After 1994, the South African government introduced laws that protected women's rights and supported women's advancement in the workplace. These laws also sought to redress past imbalances and eliminate unfair discrimination in terms of race, gender, and disability. Corrective labour practices such as the Employment Equity Act No. 55 of 1998, the Basic Conditions of Employment Act No. 75 of 1997, and the South African Constitution of 1996 were introduced. These laws aim to promote equal employment opportunities to all, including previously disadvantaged groups such as black, Indian, colored people and women. To substantiate the previous statement, Horwitz and Jain (2011) affirm that historically, apartheid created inequality in access to education, skills, professional and managerial work for blacks (including for Coloured and Indian people).

As much as there have been laws redressing issues of equal employment in South Africa, Anonymous (2012), Du Plessis and Barkhuizen (2012), Hicks (2012) & Lewis-Enright, Crafford, and Crous (2009) note that progress with gender transformation and equity in the South African workplace is still unsatisfactory. In relation to the current research study problem, Anonymous (2012), Du Plessis and Barkhuizen (2012), Hicks (2012) & Lewis-Enright, Crafford, and Crous (2009) argue that there are gender differences in the perceptions of workplace advancement, career advancement, affirmative action, and gender equality and transformation in the South African workplace. In the next section, the global background to the problem is provided.

1.2.1. Global background to the problem

In today's world, the Information and Technology and Communication sector is one of the most valued sectors with the most important contribution toward economic advancement and sustainability of any country. Given that women now have access to more employment opportunities, it is not only important to attract and retain women, but also understand their unique work-life balance demands in a sector like Information and Technology and Communication, which is male-dominated. In spite of the global initiatives already undertaken to address inequalities in the workplace, attracting and retaining women in the ICT sector, remains a challenge because their unique experiences are still not fully explored. According to Sullivan and Mainiero (2007), technological advancements have led to a change in attitudes towards career development that involves balancing family and work priorities and requiring firms to redefine how work gets done.

In this current research, what is not known are the unique perceptions and experiences of women in the ICT industry of South Africa.

Biron, Cooper and Burke (2014) believe work and family life have separate responsibilities requiring attention, physical presence, and time often causing friction with the other. Not only can work-life balance be suggested a problem for women who are caring for a family but for all female employees, whether married, single, separated, divorced, widowed in a relationship. However, with the trend in the integration of gender roles, responsibilities for work, domestic work, and childcare are not necessarily restricted to traditional gender roles (Wang, 2013). Kabat-Farr and Cortina (2014) and Robnett (2016) state that the demand for role flexibility, Work-Life Balance (WLB), and more importantly, gender equality is increasingly evident in the male-dominated career fields, such as Science, Technology, Engineering and Mathematics (STEM), where women are underrepresented.

Maji (2019) asserts that despite a steep increase in female representation in the workforce in the last decade, the gendered division of labour in the family remains broadly unaltered. Even those who work for the same duration as their husbands in the office and contribute equally or more to the family's financial status often take most of the shares of childcare responsibility and domestic work. Maji (2019) states that work-family conflict is a global problem for working men and women; the struggle is even more prominent among working women, especially those who work in male-dominated sectors such as engineering and technology. Working in gender-atypical professions, females in engineering and technology face solitary status and experience perceived discrimination and social identity threat. They are required to put additional effort to adjust to the work environment, which in turn impacts their work-life balance status.

Global studies have been conducted on women's challenges, such as an Indian study which confirmed that work-life balance among Indian female IT professionals would be difficult to achieve due to the traditional role of a woman being deeply rooted in the Indian culture (Valk & Srinivasan, 2011). In comparison to the African context, women are expected to exclusively take care of the home, even if they are secularly employed, and in extreme cases, they may be expected to give up their jobs which can put a lot of stress on women's well-being, commitment to their jobs, and performance at work (Anyaku, 2019).

The next section looks at background to the problem in the South African context.

1.2.2. Background to the problem: The South African context

The end of apartheid in 1994 marked a new beginning for South Africa, creating many opportunities, challenges, and uncertainties for South African organisations. There are too few women working in the Information Communication Technology (ICT) sector because of the existing status quo inherited from systematised denial of educational and job opportunities to women in the past.

In South Africa, due to legislation that promotes equality in the workplace, women are accessing these new opportunities. The legislation in place that promotes equality and skills development in the workplace in South Africa are as follows:

- The Employment Equity Act No. 55 of 1998;
- Skills Development Act No. 97 of 1998 which was later amended as the Skills Development Levies Act No. 9 of 1999 (with effect from 1 September 1999);
- The Skills Development Amendment Act No. 31 of 2003 subsequently replaced the Skills Development Levies Act No. 9 of 1999 (with effect from 14 November 2003); and
- The Skills Development Amendment Act No. 37 of 2008 later took effect from 6 April 2009, and as of 7 December 2010, the Higher Education Laws Amendment Acts 26 of 2010 took effect.

The legislation enacted in South Africa has helped in affording women opportunities in the workplace and as the SA News (2016) reports, the South Africa's Information Communications Technology (ICT) industry has become more accessible to women in the past few decades. Despite opportunities being available since then, women still remain underrepresented in this sector.

It is documented in literature that women, not only in South Africa but all around the world, are working on gender transformation, challenging the old norms that have been set out for them (Appiah, Poku & Acheampong, 2014; Wepfer, Brauchli, Jenny, Hämmig & Bauer, 2015). Study findings by Moosa (2017:5) added that, "household responsibilities, childcare, and other domestic-related duties were still seen as a female's main responsibility. There was a constant issue regarding balancing both domains, and to some extent, certain legislation in various countries, including South Africa (those that were identified in the previous section), have been put in place to address this issue." Consequently, this has also resulted in a negative impact on the women, who find themselves spending more time at work and thus struggling to balance this with their other responsibilities.

South Africa has not been spared from the impact of globalisation and rapid technological advances. Globalisation and rapid technological advances have contributed to the blurring of boundaries between work and home responsibilities, with demands on workers and organisations becoming more complicated. This has only aggravated the women's predicament, challenging them to successfully resolve the conflicting demands of paid work and personal lives. Major increases in women's labour force participation and the resulting demise of the so-called 'male breadwinner' have often resulted in a 'double burden' for women of both paid and unpaid work. An early study by Hartmann (2010) found that the domestic division of labour weakens women's labor market position. More recently, Eurofound (2017) found that, women still provide most of the care, whether for their children, grandchildren, relatives, friends, and neighbours with disabilities or infirmity. When it comes to providing daily care, twice as many women than men are involved. This scenario makes it difficult for women to enter historically male-dominated professions, specifically those requiring extended long working hours and extensive travel away from the family.

Previous studies on work-life balance have examined the phenomenon using one method to extract data from participants either using a quantitative or qualitative approach. A recent study by Zikode (2020) used a qualitative exploratory approach in a South African study utilising 10 ICT female managers at an ICT company. The challenge encountered in this study was selecting and interviewing participants, due to the scarcity of female managers in the ICT sector. And for the few employed female managers their demanding schedules limited the numbers who were able to avail themselves for the interviews, leading the researcher to settle for a considerably relatively small sample size of ten. The current study identified the research gap, thus opted to use a mixed-methods approach on a larger sample of 16 female ICT professionals. Other recent studies like Aranda and Jerrard (2019) utilised a qualitative method emphasising the continued existence of inequality in these male-dominated professions, based on existing research that shows what continues to be an underrepresentation of women in engineering or ICT. The study by Aranda and Jerrard (2019) was a comparative study between Australia and Chile.

Brue's (2019) study used 39 women leaders from various organisations in the United States of America. They were a part of a STEM initiative group in a quantitative study that is straightforward and makes the measuring of phenomena like human behaviour in natural environments challenging. This study overcame Brue's (2019) study's limitations by utilising both a quantitative and a qualitative approach, yielding more comprehensive results.

Other recent studies like Atouba and Lammers (2018) conducted a quantitative study of 111 IT workers (engineers, technicians, systems/network support personnel) from an IT company based in the Midwest of the United States, and Brue (2018) used a quantitative approach on a women's only Science, Technology, Engineering, and Mathematics group (45 members), also based in the United States of America. The same can be concluded for Padmanabhan and Kumar (2016), who utilised a quantitative study of 75 Information and Communication Technology (ICT) women professionals from 7 various ICT organisations from Bengaluru, India.

From recent reviews conducted, it is clear that many studies available are not South African-based, so this study also contributes to bridging the knowledge gap of the literature of work-life balance experiences of female Information and Communication Telecommunications professionals in South Africa. This study is unique as it also contributes to the existing body of knowledge by providing a mixed-methods approach to exploring experiences of female Information and Communication Technology professionals in a South African context.

By understanding the challenges and experiences of females businesses will be better informed to make more progressive policies and economic strategies designed to create more flexibility and work-life balance initiatives for their human resource practices. Employers will benefit from an ability to provide policies and economic strategies that are suited to responding effectively to families' changing realities, and thereby maintaining an effective and efficient female workforce who are able to remain focused on accomplishing the organisation's goals. In the next section the problem Statement is provided.

1.2.2.1. Problem Statement

In today's competitive age, work needs, changing demands of the work environment regarding work-life balance, and workplace regulations have tremendously changed. This has led to work-life balance challenges resulting from the pressure from the fast-paced work environment.

Tasnim, Hossain, and Enam (2017) state that the issue of work-life balance has grabbed researchers' and academics' attention because of its effect on professional and personal life. Tasnim et al. (2017) cited that while evidence shows that a balanced work-life creates harmony in both professional and personal life, the imbalance between work and personal life can have an adverse impact on an employee's personal life, which can lead to job dissatisfaction, and consequently a negative effect on the organisation's productivity and reputation.

Anila and Krishnaveni (2016) assert that work-life balance stabilises the balance between work and home responsibilities, and an imbalance can lead to stress and strain. In this regard, the problem is that the demand for a work-life balance tends to affect more females than their male counterparts because of the traditional responsibilities that the women have to take care of, especially at home. Anila and Krishnaveni (2016) state that, as families are faced with a lot of challenges and problems for daily survival, this necessitates balancing the responsibilities at work and home, creates the need to share family responsibilities among family members. In particular, women tend to face more problems compared to men, as the burden falls on women to take care of all the household chores. Thus, work-life balance may pose a more significant challenge for women as compared to men.

Females with aging parents or with children may find personal life demanding. Females in the workplace now play a significant role, thus there is mounting on-going pressure from female empowerment groups calling on organisations to accommodate females through various means like exercising flexibility in their work policies. Although both males and females share work to fulfil their financial needs, the burden still remains on females to fulfill family expectations, managing the home, and taking care of the children and parents.

In South African culture, women face more challenges in striking a balance between personal and professional life, and the issue of work-life balance is increasingly becoming important as families are increasingly becoming nuclear and dual earners. In line with changing demands of organisations and increasing families' responsibilities, new work-life balance challenges are emerging, and conflicts are increasing. In trying to understand, work-life balance experiences amongst women, more research needs to be undertaken in male-dominated fields. There is a paucity of studies that look at female Information and Communications Technology professionals primarily in the South African context.

This study is designed to contribute toward closing this gap by answering the question:

“What are the experiences of women ICT professionals regarding work-life balance?”

The challenges and experiences of South African female ICT professionals working in the Information and Communications Technology industry, how they can achieve a balance between private life and work life, these issues are central to the problem in this study. For female ICT professionals, the ever-changing demands of their work environment directly impacts their personal lives, making it difficult for them to manage their household

responsibilities. The study focuses on female Information and Communication Technology professionals at Telkom, explores and evaluates awareness and current experiences with all aspects of work-life balance. The study also aims to develop a framework designed to apply on different work-life balance aspects in the South African context. In the next section a contextual background of Telkom is provided.

1.2.3. Telkom: A contextual background

The selected organisation for this study was Telkom Headquarters in Pretoria, South Africa. Approximately twenty-seven years ago, Telkom was the only South African telecommunications company. Its expansion has since established offices in all the nine South African provinces, with the Head Office remaining in Pretoria, Gauteng Province. In line with the transformation of telecommunications in South Africa as well as globally, Telkom's services have expanded, to include the following: digital technology, modern and current network, internet, managing data networking as well as hosting, Information Technology security and services.

Telkom SA was formed in 1991 after the former Department of Post and Telecommunications was split into three entities: Telkom, the South African Post Head office and a new Department of Post of Telecommunications. Telkom was an entity owned and run by the government to provide phone services, amongst other things, to the country. Telkom has the largest national fiber networks, offering internet connectivity to most areas in the country. In South Africa, there are other network providers operating according to data by MyBroadband (2014), and these include Neotel, Broadband Infraco (Infrastructure Company), Fibreco, DFA (Dark Fibre Africa), South African National Research and Education Network (SANReN), Vodacom and MTN.

The reasons for choosing Telkom for this study are as follows:

- a) According to MyBroadband (2020), it has gained the best reputation for having an excellent network, offering high-quality broadband products to the market, continuing to set the benchmark in many other areas, and still holding the potential to have a massive impact on improving broadband access in South Africa.
- b) While other telecommunications organisations exist, they were not as open to assisting in the research as Telkom was, citing that they preferred to keep research activities in-house, to their employees and not external researchers.

c) To gain a much richer analysis of an organisation's operations in the telecommunications sector, Telkom worked out better as it is still the monopoly in that sector. Telkom still currently has the most well-established infrastructure compared to the other players in the telecommunications sector, which has enabled it to roll out products at a faster rate. However, not to be ignored is the 2008 South Africa's High court ruling, which involved one of the first cases that challenged competitor establishments' respective roles. The sector regulators and jurisdiction over anticompetitive conduct in the telecommunications sector were challenged. Several networks which exclusively relied on Telkom lines for provision of services to their clients filed complaints against Telkom. Telkom has since faced increasing competition from large and smaller telecommunications companies.

d) Fourthly, as a market-leader employer of choice, Telkom offers flexible benefits, and work-life balance initiatives. Telkom has gained a good understanding and appreciation of its employees' diverse needs and financial goals, thus strives to do its best to ensure all employees are well looked after. Telkom has an employee wellness division, which is intrinsic to the Telkom employee value proposition for optimising employee wellness in their workplace. There is also a Female Leadership Development initiative for graduate internship programmes.

Telkom utilises the 'Smart Working' concept of working, a new business model that enables most innovative organisations to use technology to increase flexibility at workplaces. In the next section the focus of the study is provided.

1.3. Focus of the study

Tarsus.today (2018) reports that women remain underrepresented in Technology industries, particularly in South Africa, where the sector is still male-dominated.

The study focuses on examining the experiences of female Information and Communications Technology professionals in a telecommunications organisation. The unique experiences that females encounter in a male-dominated sector are explored to understand how females are faring in such a sector.

To explore the work-life balance experiences of female ICT professionals, the following aims have been established:

Aim 1: To explore awareness of existing work-life balance programmes in the telecommunications organisation.

Aim 2: To investigate the work-life balance experiences of female ICT professionals in the telecommunications organisation.

Aim 3: To evaluate the experiences of female ICT professionals that inform their decision to leave or stay with the telecommunications organisation.

Aim 4: To develop a framework that may help with different work-life balance aspects in the South African context. In the next section the research objectives of the study are provided.

1.4. Research objectives of the study

The research objectives below were developed to thoroughly explore the aims of this study:

1. To investigate the organisation’s features and personal practice through the information from surveys available from the telecommunications company that enable employees to achieve work-life balance at the telecommunications company.
2. To evaluate the extent to which all employees are aware of policies and programmes that are in place that address work-life balance at the telecommunications company.
3. To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company.
4. To determine what personal and work experiences and challenges female ICT professionals are currently facing, which could influence their decision to stay or leave their ICT job the at the telecommunications company.
5. To develop a work-life balance framework to a practical problem on how female ICT professionals balance work and family responsibilities at the telecommunications company.

Table 1.1. shows how the different stages of the current study are linked to the research aims and objectives.

Table 1. 1: Stages of the study linking the aims and objectives

	Stage 1 Secondary data collection	Stage 2 Quantitative Study	Stage 3 Qualitative study	Stage 4 Framework formulation
Aim	1	2	3	4
Research objectives	1	2 and 3	4	5
Information source		Female ICT professionals	Female ICT professionals	Female ICT professionals/study findings
Data collection method	Data Retrieval (HRIS)	Online Survey	Interviews	Study findings
Data analysis	Statistical analysis	Statistical analysis	Thematic analysis	Development of framework from outcomes of the study

The next section provides the theoretical framework used for the study.

1.5. Theoretical framework

As the current study involves the work-life balance experiences of female Information and Communications Technology (ICT) and their various life roles in personal and work domains, the Life Course (LC) Perspective by Giele and Elder (1998) and the Border Theory by Clark (2000) form the basis for the theoretical framework. The first concentrates on the human development in the ICT profession and how responses to this can impact on career progression, how women perceive and attach meaning to their work-life balance, and the second considers ways of managing the boundary between work and family.

1.5.1. Life Course (LC) Perspective (Giele & Elder, 1998)

The Life Course (LC) Perspective (Giele & Elder, 1998) is a perspective of human development formulated by Elder in 1998 (Newman & Newman, 2010). It offers a framework for understanding and explaining how women perceive and attach meaning to their work-life balance. The perspective is also significant in that it views work-life balance as being fluid and shaped by societal conditions and social norms. This framework is useful for the purposes of this research because it offers ways of thinking about work-life balance as a subjective experience, which changes over time. It recognises the impact of the historical context on development, the interconnectedness of multiple roles, and the processes which impact on the lives of individuals.

According to Newman and Newman (2010: 55), “the term life course within this approach refers to the integration and sequencing of phases of work and life over time”. The life course is made up of various phases and roles, which people fulfill in their work domain as well as their life domain. These phases and roles make up the individual’s life course. Elder (1998), a leader in the elaboration of the LC perspective has created a way of thinking about individual’s lives as embedded in historical and contextual periods and as constantly changing.

Figure 1.1 shows the Life Course Perspective (Giele & Elder, 1998).

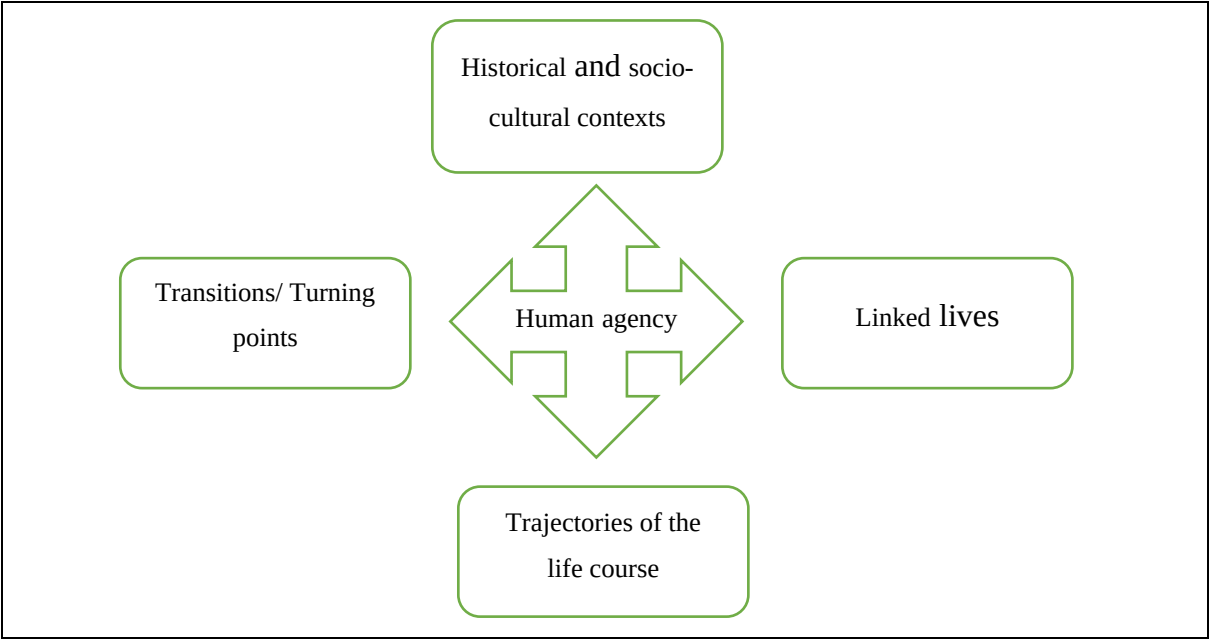


Figure 1. 1: Life Course Perspective (Giele & Elder, 1998: 145)

There are basic concepts of the Life Course Perspective (Giele & Elder, 1998) that are very important for this study:

Cohort: Group of persons who were born at the same historical time and who experience social changes within a given culture in the same sequence and at the same age, and this is very important in terms of understanding the current study, given that the population under study will be obtained from people born during the same historical time frame, and who experience the same social circumstances. This is in terms the form of experiencing the same technological changes. Both older and younger employees all have to move in tandem with technological advancements.

Transition: Change in roles and statuses that represents a distinct departure from prior roles and statuses. This is a very important link given that all females experience transitions such as marriage, childbearing, care of dependents and so on. This inevitably necessitates a change in terms of life roles.

Trajectory: Long-term stability and change patterns usually involve multiple transitions, and opportunities to radically shift the direction of one’s future and experience a new way of life. In this context, an example would be a promotion or demotion at work. Another example of a trajectory is simply based on the path that a person chooses for their life, for instance, a decision to continue or leave a career the Information and Communications Technology.

Life Event: A significant occurrence involving a relatively abrupt change may result in severe and long-lasting effects. Examples of life events include parental divorce, separation, a change of educational institution, home relocation, and bereavement.

Turning Point: A life changing event that produces a more permanent shift in the life course trajectory, such as pregnancy, as this completely changes one's life and the way they live.

The aspects that this current study will utilise under the Life Course Perspective (Giele & Elder, 1998) are cohorts, transitions, trajectories, and turning Points.

1.5.2. Border Theory (BT) (Clark, 2000)

The Border Theory (Clark, 2000) is the other theoretical framework utilised for this study, and it explains that domain members, noted as border keepers, conjointly play a task in boundary management. For example, supervisors act as border keepers inside the work domain, and spouses act as border keepers inside the house domain. Clark (2000) affirms that border keepers are more concerned with negotiating what constitutes a site and wherever the borders between domains lie. Clark (2000) also declares that border keepers may have their views regarding what constitutes work and family and provide differing degrees of flexibility that impact the benefit to wear down competitive work and family demands. For example, a supervisor might not allow personal phone calls at work, thereby preventing the family from intrusive on the work domain.

The central focus of Border Theory (Clark, 2000) is that borders and bridges between work and family must be appropriately managed to create and maintain a desired balance. Clark (2000) asserts that, physical, temporal and psychological borders define the border/borderline at which work, and family begin or end. Clark (2000) continues by saying that, a borders' strength depends on its' ability to: prohibit flow from one direction but not the other (permeability) and bend toward one direction to accommodate the demands of one domain or another (flexibility).

1.5.3. The relevance of the Life Course Perspective (Giele & Elder, 1998) and Border Theory (BT) (Clark, 2000) to the current research problem

Social scientists used two explanations for human behaviour prior to developing life course theory. First, an examination of marriage and family was conducted using a social relations perspective. Functionalists, exchange theorists, and ecologists use this approach. As a second approach, longitudinally followed or explained lives were examined using a temporal approach (Giele & Elder, 1998). These approaches, however, failed to capture the complex interactions

between social structures and the impact of time, place, and history on individuals' lives (Giele & Elder); neither by itself could reveal the intricate relationship between social structures and time, place, and history. The life course theory developed from a confluence of these approaches in the second half of the 20th century (Elder, 1996).

Using the Life Course (LC) Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) as theoretical frameworks for this current study to understand this study's research problem, it is possible to understand work-life balance as an interconnected set of domains that considers the interdependent relationship between them. Many female employees experience an imbalance or lack of balance between work and life, which can negatively affect their quality of life and quality of working life.

Figure 1.2 shows the Border Theory (Clark, 2000).

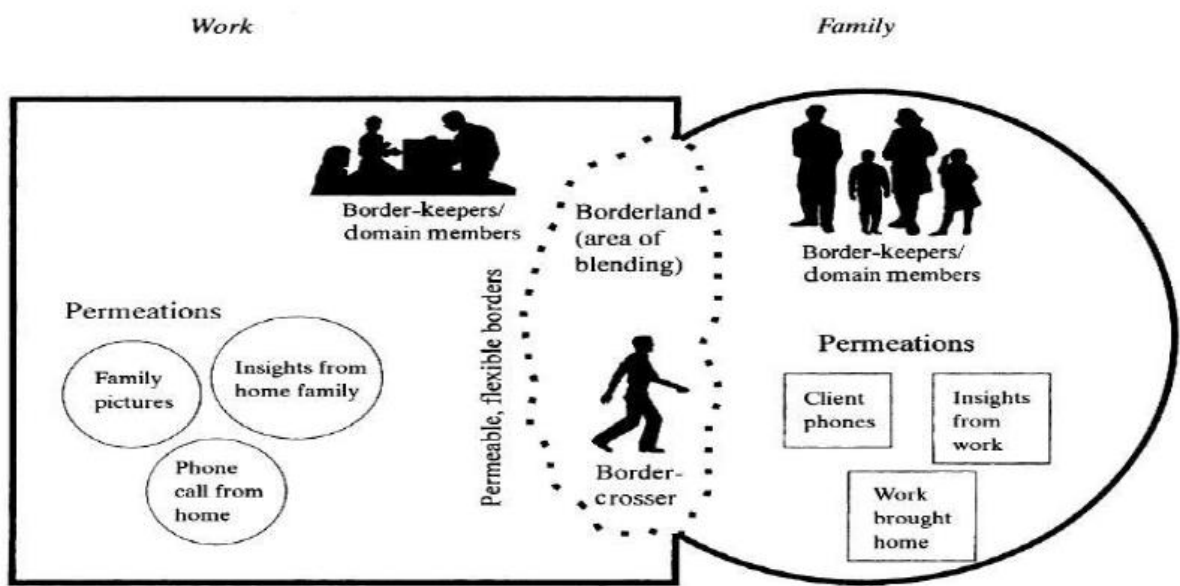


Figure 1. 2: Border Theory (Clark, 2000: 754)

1.5.4. The Theoretical Framework of the study

The current study utilises the Border Theory and Life Course Perspective (Giele & Elder, 1998) as the theoretical basis of the study. The next section combines the two theories to illustrate how they form the foundation and link to the aims of the study.

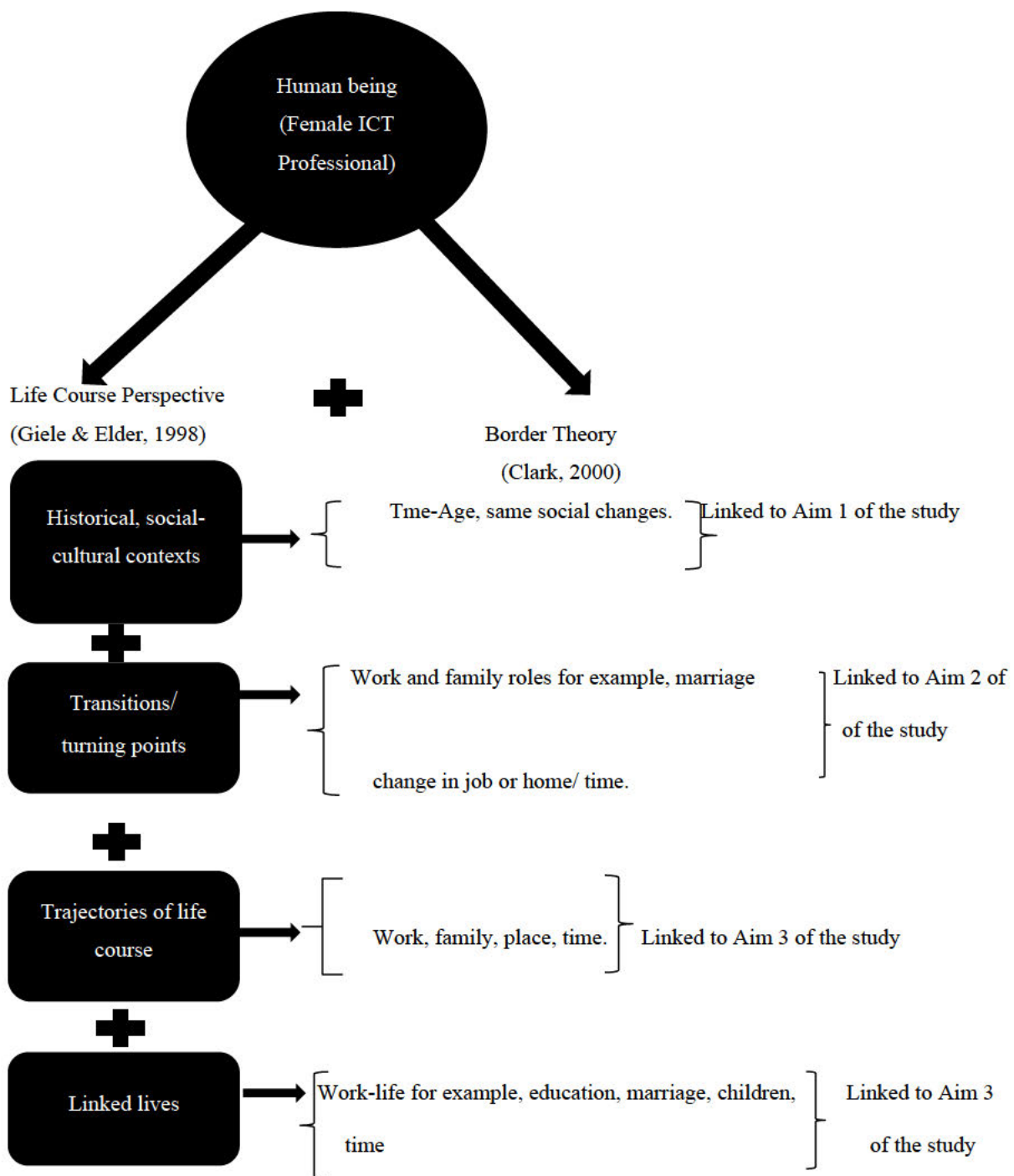


Figure 1. 3: The Border Theory (Clark, 2000) and Life Course Perspective (Giele & Elder, 1998) as the theoretical framework of the study

(Source: Author's own construction)

The following section describes the aspects of the Border Theory (Clark, 2000) and Life Course Perspective (Giele & Elder, 1998), according to figure 1.3, used for the theoretical framework of the study.

Figure 1.3. shows that the human being (the female ICT professional) is key to understanding the current study. Human beings go through different stages of existence in their lifetime and are shaped by their different contexts and backgrounds. Figure 1.3 combines the Border Theory (Clark, 2000) and Life Course Perspective (Giele & Elder, 1998) as the study's theoretical basis. The Life Course perspective (Giele & Elder, 1998) is essential to this study as it views life as embedded in historical time and place and influenced by the web of relationships individuals are linked to and more distal social structural factors. The Life Course perspective (Giele & Elder, 1998) relates to the Border Theory's (Clark, 2000) aspect of age and social changes. For example, individuals within the same age group may experience similar issues when born within a specific time. This may help explain why certain people of a particular age group behave the way they do. Relating this to Aim 1, which explores the awareness of existing work-life balance programmes in the telecommunications organisation, it would explain employees' behaviour based on their awareness of work-life balance programmes and the usage thereof due to their social-cultural backgrounds.

The Life Course Perspective (Giele & Elder, 1998) aspect of transitions/ turning points relates to the Border Theory (Clark, 2000) aspect of changes in work and family roles, such as marriage, changes in the job. The current study explores the different work-life balance experiences of female ICT professionals and how this affects their lives. This relates to Aim 2, which investigates female ICT professionals' work-life balance experiences in a telecommunications organisation. This would explain how people manage their times in both spheres of their lives, that is, personal and work. The decisions that females make inevitably affect their careers, for example, choosing a supportive spouse/civil partner.

The current study's Aim 3, which evaluates female ICT professionals' experiences that make them leave or stay with the telecommunications organisation, is related to the Life Course Perspective (Giele & Elder, 1998) aspect of trajectories linked lives. This can be used to understand female ICT professionals in the ICT profession related to work, family, place, and time on the Border Theory (Clark, 2000) aspect. This may be in the form of decisions that one makes that formulate a long-term pattern of stability and change, for example, having children, furthering one's education or career, or getting married, or the decision to stay or leave the Information Communications and Technology (ICT) profession. The decisions may be work or life-related and have an effect on the aspect of time. In the next section the contribution of the study is provided.

1.6. Contribution of the study

The Information and Communications Technology sector is male-dominated, and as females enter the field, the need to anticipate and appreciate their different experiences and challenges becomes essential. Globally, there is an increased interest in work-life balance; in South Africa, there remains of insufficient studies on female South African Information and Communications Technology professionals' work-life balance experiences. This study aimed to add to the discourse of work-life balance experiences of female South African Information and Communications Technology professionals, assist employers in understanding work and home-life balance challenges for female employees, assist employers gain a good understanding and appreciation of the importance of accommodating work and home-life balance for female employees, and acknowledge that this is a significant factor in enhancing employee performance and satisfaction in a male-dominated career. This study resulted in a Work-Life Balance Framework that links the Life Course perspective by Giele and Elder (1998) and Border Theory by Clark (2000), making a novel contribution to the empirical body of Work-life balance. The research methodology and design is provided in the next section.

The insights gained by exploring the work-life balance phenomenon through the Border Theory (Clark, 2000) and Life Course Perspective (Giele & Elder, 1998) underscores the critical role of female experiences and perceptions in terms of the attainment of work-life balance (how, where, and when work is done), which is significant for achieving work-life balance. Nevertheless, the dual role of women has blurred the lines between work and non-work. Consequently, employees are being forced to work longer hours, which impacts their family relationships and career choices.

An essential contribution of this study is adapting and expanding the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) to women in the contemporary Information Communication and Technology sector in South Africa.

1.7. Research methodology and design

This research employs a mixed-methods methodology that involved secondary data collection (information from the Human Resource Department of Telkom, HRIS), an online open-ended and closed-ended **Google DriveTM Forms** survey named "*The Work-Life Balance Study Employee On-Line Survey*" and semi-structured interviews.

To meet the four main aims, the study will consist of four stages, and each of the stages is designed with the specific objectives, as per Table 1.1.

STAGE 1: Secondary data collection

This chapter covered Aim 1, research objective 1 of this study. In this chapter, the organisation's features and personal practice that enable employees to achieve work-life balance at the telecommunications company are investigated.

STAGE 2: Quantitative study

Stage 2 covered aim 2 of the study. For stage two of the data collection, E-mail addresses were also obtained for the descriptive analysis stage. The frequency at which employees utilised the policies and programmes at Telkom was explored through the information obtained from Telkom HRIS. The current research utilised "*The Work-Life Balance Study Employee On-Line Survey*" using open-ended and closed questions in a survey sent to respondents to answer at their own convenient time.

STAGE 3: Qualitative study

Stage 3 covered aim 4. Semi-structured interviews with the female Information Communications and Technology (ICT) professionals were conducted to gain insight into their experiences. Semi-structured interviews provided the researcher with information required to develop the framework designed to assist organisations in developing good work-life balance initiatives for their employees.

STAGE 4: Framework formulation

Stage 4 covered aim 4. The findings of the study, with the aid of the female Information Communications and Technology (ICT) professionals' viewpoints, contributed toward the formulation of a framework on work-life balance. In the following section, the limitations of the study are provided.

1.8. Limitations

Limitations are potential weaknesses or conditions restricting or affecting the external validity (Marshall & Rossman, 2016). A limitation is the cross-sectional nature of the analysis, which mildly restricts generalisability. This survey was conducted among female Information and Communications Technology professionals during a specified point in time, hence this snapshot does not fully capture how their responses may have changed over longer periods, or at different times.

Due to logistical and time constraints, the study was confined to Telkom, Pretoria, Gauteng Province. Due to the nature of the study, especially the interview aspect, which was conducted

at different times depending on the respondents' availability, there were a variety of potential threats to internal validity, including subjects' characteristics, mortality, instrument, maturation, and history (Fraenkel & Wallen, 2011); some variables could have influencing factors on the results.

Personal and environmental factors such as attitudes, time of day, and time of year the survey was distributed, may have impacted the results. It was difficult to assess if the study's location created a threat to its validity, as this was dependent on where the participant decided to take the survey, since it was an online survey, thus could be accessed from any place with Internet connection. If respondents answered the survey questions at the office during working hours, their responses might have reflected their current mood while at work. If respondents took the survey outside of regular working hours, outside the office environment, the responses to the questions may have differed.

Mortality is always a threat to the validity of a study when subject participation is not required. The study participants had the options of not responding to the survey or starting the survey and not completing it. The study's loss limits the generalisability and is one of the most challenging threats to control the results (Fraenkel & Wallen, 2011).

Another limitation was; since the data collection process and permission were granted on the instruction of the ICT managers, the researcher had to make sure that he followed the managers' directives. This meant meeting the survey participants at times that were convenient to them, without any disruption to their regular work schedule.

A final limitation was the findings could not be generalised to all telecommunication institutions nationwide due to the restricted sample, and as such, findings from this study may only be applicable to Telkom in Pretoria. This means that this research's findings may not necessarily be indicative of the entire South African telecommunications sector, but rather, to a lesser extent, apply to telecommunications providers of the Pretoria telecommunications company and its environs, because the respondents in this study were female ICT professionals employed at Telkom. Therefore, the findings cannot be applicable on other groups of individuals.

In the next section an overview of the structure of the thesis is provided.

1.9. Overview of thesis structure

Chapter 1	Introduction and overview of the study: This chapter introduces the aim and the purpose of the study and the background to the research problem and the significance of the research.
Chapter 2	The Information and Communications Technology sector: A general overview: This chapter presents the first part of the literature review. The ICT sector: a general overview will be presented.
Chapter 3	Theoretical foundation of the study: This chapter provides the second part of the literature review. An in-depth analysis of existing literature on the theoretical frameworks used to provide the theoretical and empirical foundation for this study will be looked at.
Chapter 4	Work-life balance and Telkom work-life balance document analysis: This chapter provides the third part of the literature review which is; work-life balance. This chapter also presents the document analysis of the Telkom policy and programme.
Chapter 5	Research methodology and the data generation approach: This chapter outlines the research method adopted for the study in addressing the research objectives.
Chapter 6	Stage 1: Secondary data collection of the Study: This chapter covers Aim 1, research objective 1 of this study. In this chapter, the organisation's features and personal practice that enable employees to achieve work-life balance at the telecommunications company are investigated.
Chapter 7	Stage 2: Quantitative Data collection of the Study: This chapter presents the results of Stage 2: The quantitative study which covers objectives 2 and 3. Here the results of the self-designed on-line survey, " <i>The Work-Life Balance Study Employee On-Line Survey</i> " is administered to respondents, that is, 50 female ICT professionals. In this chapter, the responses obtained for the quantitative data collection phase of the study will be computed using the software <i>Google™ Drive Forms</i> and exported to Statistical Software Package for Social Science (SPSS) version 26 for Windows.
Chapter 8	Stage 3: Qualitative Data Collection of the Study: This chapter presents the results of Stage 3: The qualitative study and it covers the research objective 4. In this chapter, the responses obtained from the interviews with 16 female ICT professionals are presented and analysed using <i>Atlas.ti</i> version 8 software.
Chapter 9	Discussion of Results: This chapter presents a discussion of the results of all the phases of the study, by using a mixed method design to integrate results into a more meaningful discourse.
Chapter 10	Conclusions and Recommendations and stage 4: Framework formulation: This chapter presents a summary of the findings. Stage 4 looks at Aim 4 and objective 5, which is the formulation of the framework of the study. The resulting work-life balance framework is also discussed looking at validation of the work-life balance framework, impact of the framework and limitations of the framework. The chapter also makes the relevant conclusions based on the research aims and research objectives, before outlining the contribution of the study and making recommendations.

1.10. Conclusion

This chapter has provided an overview of the study, setting out the background to the problem for the study, the focus and the theoretical framework including the contribution of the study, the aims and objectives of the study, and it has provided an overview of the chapters of the study. The next chapter provides a review of the literature on the Information and Communications Technology sector.

Chapter 2

The Information and Communications Technology sector: A general overview

2.1. Introduction

The previous chapter served as an introduction by providing the study's background and presenting the problem's statement. Furthermore, it presented the research objectives and questions, the key concepts, the theoretical frameworks, the research methodology, and outlined the structure of this thesis.

The literature covered in this study, is presented in three chapters namely:

Chapter 2: The Information and Communications Technology sector: A general overview

Chapter 3: Theoretical foundation of the study

Chapter 4: Work-life balance.

The chapters mentioned above discussed seminal works and more recent works that have further developed the theories used for this study. This approach aims to provide a broader and diverse understanding of the current literature on these topics, thereby allowing the researcher to have an in-depth perspective of the subject, thus permit the study to be underpinned by existing scholarship. This chapter, 'The Information and Communications Technology sector: A general overview,' provides this study's background.

The current chapter is presented as follows:

- The Information and Communication Technologies (ICT) sector: A general overview
- A Global Perspective of the Information and Communications Technology Sector which looked at the following regions:
 - Europe
 - South America
 - Middle East
 - Asia
 - Africa
- Profile of the South African Information and Communications Technology work force
- Employment in the South African Information and Communications Technology sector
- The South African telecommunications industry
- Employment in the South African telecommunications sector

- Challenges or barriers women face in the South African Information and Communications Technology sector.

This chapter serves to provide the background of literature and sets a foundation for the study.

Information and Communication Technologies (ICTs) have profoundly changed how global business is conducted. Information and Communication Technologies (ICTs) are the technological tools and resources used to make, circulate, stock, and manage information in today's fast-paced information age. The Information and Communications Technology (ICT) sector consists of components as diverse as telecommunications, television, radio broadcasting, computer hardware, software and services, and electronic media, such as the Internet and electronic mail, which have become a necessity of everyday life.

The Telkom Integrated Report (2018:20) described “the South African ICT market as “having a material impact on the general economy, with the biggest growth expected to be in the broadband/data segment. Technology will continue to unlock value in the economy as it optimises processes and transforms industries. This development has been dubbed the Fourth Industrial Revolution and includes, but is not limited to, artificial intelligence, automation, big data analytics, cloud storage and computing, the Internet of Things (IoT), and blockchain technology.”

It is challenging to standardise an ICT professional as they occupy different roles and functions according to the company they belong to and because ICT, like HR, has a strategic function in any business. Within the various ICT occupations, there are several different qualification profiles. A computer programmer could, for example, have a BSc degree, obtained over several years at a university, or only have a six-month training certificate from a private training institution. According to the JCSE (2016), computing technologies have become integral in driving social and economic advancement, and the primary cause for digital disruption in business models and labour dynamics in the 21st century and as Pokpas, Craffert, Van Audehove and Marien (2019) assert, ICT is considered as having a crucial role to play in addressing South Africa's national challenges as an enabler of social and economic advancement.

Additionally, Ryklief (2018:7) asserts that “synonymously referred to as Information and Communications Technologies (ICTs), they continue to evolve at an astonishing pace with new

technologies being introduced continually, and existing ones becoming obsolete almost as soon as they appear.”

The next section looks at a global perspective of the information and communications technology sector.

2.3. A Global Perspective of the Information and Communications Technology Sector

As the world moves to an inevitably computerised economy, some low-and middle-income nations confront an impediment of not having the requisite skills within the female category to fill ICT opportunities. Most developing economies need qualified individuals to fill the necessary Information and Communication Technology (ICT) jobs, a shortage that is exacerbated by the low presence of women in the technology education institutions. This challenge could be solved by coming up with deliberate initiatives to organise educational programs geared at to improving females’ enrollment into ICT careers, for future planning to avoid female exclusion from these workplaces, as ICT continues to advance in every sector of the world.

Gurung (2018: 50) explains that “exponential use of ICT has brought colossal opportunities and challenges to the present society. Despite increasing women’s involvement in Information, Communication, and Technology (ICT), gender inequality has remained critical across nations and the globe. The uneven access to technology and shortage of high technological skills, have intensified the digital divide, especially for women.” Masika and Bailur (2015) noted that there have been significant efforts globally to achieve gender equality. Much of the focus has been given to women’s economic, political, and social empowerment. However, it has been noted that women’s involvement in using and designing new technologies can empower them socially and economically.

Women in Global Science & Technology (WISAT) (2018) Report found that the number of women in science, technology, and innovation was alarmingly low in the world’s leading economies and had declined in several, including the United States. Women remained severely under-represented in degree programs in these fields. Even in countries where the numbers of women studying science and technology increased, more women were still not able to maneuver their way into these male-dominated workplaces.

The current study is based in South Africa. However, it is important to examine the global trends and status quo as technology is a global phenomenon. The next section looks at trends and the status quo on the European continent.

2.3.1 Europe

Earlier studies by the European Commission report (2013) showed that only 29 out of 1000 females with a bachelor's degree (in Europe) is within ICT field, compared to 95 out of 1000 males. In 2016, the situation had not changed as Blomstrand and Sang (2016:2) described that "the ICT Industry has been traditionally male-dominated."

To compound the problem, to a much greater extent, more women than men left the sector mid-career (Beninger, 2014). A report by the Union for the Mediterranean (2015) found that women were still underrepresented in the ICT sector in the European Union. Out of 1,000 women with a bachelor's degree in Europe, only 29 held a degree in ICT (compared to 95 men), while only four eventually worked in the ICT sector.

The Union for the Mediterranean (2015) also reported that more women left the sector mid-career than men. 20% of women aged 30 years with ICT-related bachelor's degrees worked in the sector, while only 9% of women above 45 years old did not. These studies of 2015 demonstrated that the sector was still not attractive to women because it was not adapting to the aspects of life that women value the most (balancing work and family life): long hours, a very competitive and fast evolving environment demanding continuous upgrading of skills.

In Spain, González, Revelles, Almeda, Vergés Bosch, and García (2016:173) found that "ICT employment was a relatively small percentage of the total Spanish employment (4%). This sector of activity only represented 1.4% of the workers; however, the economic sector's importance increased the relevance for the workforce." The situation in Spain from the above statement signalled that, already, the ICT employment sector was small and led to another issue of having few females in that sector as González, et al. (2016) further expounded that, the women representation in ICT occupations was very inadequate at 0.6% in comparison to men at 2% of the total work population. The Labour Force Survey in 2015 reported that the unemployment rate (people in the ICT sector who left the labour market in 2014) reached 3.2 %, similar for men and women in the workforce.

The case in Spain stems from the career choices women take in further education. The Ministerio de Educación Cultura y Deporte (2019) reported that, although women were awarded 55.09% of all bachelor's degrees in Spain in 2017/18, they remained underrepresented in Science, Technology, Engineering, and Mathematics (STEM) fields. An earlier study by Gonzales et al. (2016) reported that even though Spain experienced an economic crisis from 2008-2013 in other industry sectors, ICT remained steady. Consequently, González, et al.

(2016) state that the ICT sector presents a healthy situation that positively affects the male and female workforce.

Other European studies conducted by Eurostat (2016) stated that men hold most jobs as ICT specialists. There has been a 6 % increase in the proportion of men since 2005, with men accounting for 84 % of ICT specialists in 2015. The countries with the most pronounced gender inequality in 2015 were the Czech Republic, Slovakia, and Hungary, with proportions of men in the ICT-specialist workforce of 90 %, 89 %, and 88 %, respectively. The Eurostat Report (2016) also indicates that Bulgaria had the highest proportion of female ICT specialists (28 %), closely followed by Romania (27 %) and Latvia (25 %).

In the next section, the South American continent is explored.

2.3.2. South America

Martinez, Lago, Souza, and Lago (2016) & Matos (2017) state that research in gender and the media in Brazil is still growing slowly and has been produced sporadically. Studies by Powell and Chang (2016:6) also highlighted that “women in Brazil trying to enter the ICT sector were faced with a lack of role models, little effort to get girls interested in science, a rigid scientific community, stereotypes concerning what careers were considered ‘feminine’ or otherwise attractive to women, discrimination and cultural views about men’s superiority.”

Feyerherm and Vick (2005) also reported on stereotypes that led to women being treated differently from their male counterparts and this could be seen through the issuing of menial tasks to women as compared to males.

Powell and Chang (2016) opine that, despite the apparent demand for more skilled workers in ICT, the Brazilian government has been slow to develop initiatives focused on increasing women’s participation in the sector. The state of affairs in Brazil has, nonetheless, according to Ferreira (2015), Gomes and Sorj (2014) & Natansohn (2013), attracted more interest from scholars in Brazil in the last years, with a series of studies on women and technologies.

In another South American country, Argentina, there was a drive to encourage females to enter Science, Technology, Engineering, and Mathematics (STEM) fields. Baringoltz and Gauna (2014) explained that in Argentina, women accounted for 51.6% of the scholarship holders and researchers of the whole national system of science, technology, and innovation, and out of the total researchers and scholarship holders in the field of IT, only 29 % were women. Accordingly, in the last available record, women accounted for just 19 % of students and 25 %

of degree holders in Argentina's computer science careers. However, according to Yasen and Zukerfield (2014), this was not the case in the information sector. Yasen and Zukerfield (2014) argue that this did not translate to the software industry, while many women worked in the information sector.

According to a United Nations Educational, Scientific, and Cultural Organisation (UNESCO, 2014) science report, Latin America made great strides. However, according to Huyer (2015: 93), it was stated that “female participation in computer science was falling while globally the field is an important aspect of daily life as it has become part of human life.” However, the same report by United Nations Educational, Scientific, and Cultural Organisation (UNESCO, 2014) states that a company called Laboratoria has been training young women in coding and software development skills across Latin America since 2014 to promote women in Science and Engineering Technology fields.

In Latin America, it is evident that the continent is also making ways to move in tandem with the global village. In 2016 it was a healthy year to invest in Information Communications and Technology in countries like Brazil, Mexico, Argentina, and Paraguay. However, in 2017, due to the United States of America's economy and the global political climate, many businesses had to re-evaluate the business landscape as they planned their next strategies. The steady growth of Information Communications and Technology in Latin America leads to creating opportunities for women.

The next section looks at the Middle East trends, a region with restrictive social norms that shape women's educational, economic, and career decisions.

2.3.3. Middle East

Al-Asfour, Tlaiss, Khan, and Rajasekar (2017) state that despite the wide global interest in women's careers, knowledge about women's careers in the Arab world has remained limited. Growing interest in the careers of Arab women has focused on specific countries, such as Lebanon (Tlaiss and Dirani, 2015; Tlaiss, 2014), the United Arab Emirates (UAE), and the Kingdom of Saudi Arabia (KSA) (Tlaiss, 2013, 2014). As early as 2007, Elnaggar (2007) referred to the fact that despite the great strides in Information and Communication Technology (ICT) globally and the far-reaching effects of its spread, women in the Arab Gulf region in general and in Oman, in particular, are at a higher risk of being marginalised from today's knowledge-based economy. This was based on the factual findings related to a traditionally male-dominated ICT sector, unequal access to training, the lack of 'Arabised' Internet content

and training, and the lack of awareness and policy advocacy, among others. Al-Alawi (2016) noted that women had worked hard to challenge the myth that women have more limitations, fewer capabilities, and lower performance levels than men over the last century in Bahrain.

As recently as 2019, Omair (2019) reported that the Saudi government had started making some changes that would make Saudi women more active and engage more positively in positions previously restricted to men, such as STEM fields. Two years before the Saudi government engagement on this issue, Alghamdi (2017) conducted a study examining why females in Saudi Arabia chose computer science in their studies and as a profession. The researcher interviewed ten female Saudi students enrolled in computer science courses in three Saudi universities. Alghamdi (2017) found that Saudi females were partly motivated to enter the computer science field at universities because of the fast expansion of technology. In addition, for most of the women, their families encouraged them to enter the computer science field. Alghamdi (2017) found that a primary motivation for seeking a career in computer science was the educational and occupational computer science environment, where the women could choose whether they do or do not work with men.

Another study whose results suggest a weakening of stereotypes about females' capabilities in STEM subjects among some Arab populations, and possibly in Saudi Arabia was conducted by Kohan-Mass, Dakwar, and Dadush (2018). These researchers surveyed and interviewed 50 high school students (21 boys and 29 girls) studying advanced physics in an Arab high school in Israel. Kohan-Mass et al. (2018) found that girls in the school were competitive and high achievers. The girls considered physics a prestigious study choice as the field only accepted students with high-grade averages. Huyer (2015:96) reported that "throughout the Arab states, the representation of women university graduates in science and engineering was relatively high, but there appeared to be a significant drop between college graduation and employment in ICT-related fields." Besides, Khurshid (2015) asserted that, even though they were legally and politically encouraged to pursue higher education and employment, women in Middle Eastern countries were still required to maintain their primary roles as wives and mothers. To this end, girls' and women's ability to access IT was primarily shaped by socio-cultural norms that determine female behaviour and interests.

A UNESCO science report (2015:13) found that "With just 1 percent of the labour force being Emirati, [the UAE] was also concerned about the low percentage of Emirati citizens employed in key industries." A later study by Powell and Chang (2016) found that in the United Arab Emirates (UAE), the government had prioritised developing a knowledge economy, which it

recognised as the strengthening of human capacity in science, technology, and engineering, establishing policies to train Emirati citizens and encourage greater involvement of Emirati women in the workforce.

Having explored the Middle East, the next section looks at Asia, where culture also plays a significant role in women's career decisions.

2.3.4. Asia

Trautwein (2014) looked at cultural norms and a lack of support in Myanmar, and why women were underrepresented in the profession despite their strong college participation. Trautwein (2014) reported that in a private school where all students were men and the equipment newer, companies were more likely to hire private school students over public-school students, because of their exposure to newer technology even if the two groups had the same training. Trautwein (2014) also looked at Burma, noting that the unusual working times in the technology industry required programmers to work at night, and in the Burmese setting, parents of females would not permit their children to work during such late hours.

According to Powell and Chang (2016), to remedy the gender gap in Myanmar, an initiative known as Geek Girls created an 'ecosystem' by providing connections between women and entrepreneurs, offering job opportunities in the field, and providing technical and business training, boot camps, workshops, and opportunities to meet role models.

In another Asian country, India, Chandra (2014) found that according to Wired magazine, 30 percent of India's programmers were women, in contrast to 21% in the United States. In India, according to Agarwal and Malhotra (2016:288), "women accounted for a sizeable number of Information and Communication Technologies (ICT) workforce." However, Huyer (2015) found that parents in India often encouraged their children to pursue careers such as medicine or ICT for more lucrative wages. However, a cross-sectional study conducted between 1970 and 1995 indicated that more women entered the engineering field, shifting away from the notion that the field is a masculine area (Powell & Chang, 2016 & Gupta, 2012). Another study by Mani (2013) revealed that role conflict, lack of recognition, organisational politics, gender discrimination, elderly and children care issues, quality of health, problems in time management, and lack of proper social support were the major factors influencing the work-life of women professionals in India.

In Malaysia, according to Huyer (2015:93), “the participation of women in the information technology workforce was equal to that of men due to two historical factors: the participation of women in the Malaysian electronics industry, a precursor to the IT industry, and the national commitment to securing a ‘pan-Malaysian’ society across people of Indian, Chinese, and Malay descent.” Huyer (2015) emphasised that according to UNESCO, because few Malay men pursued careers in ICT, women had more access to these jobs, and Malay parents tended to support their daughters’ entry into these prestigious, highly paid jobs, which often led to upward mobility.

In China, where the patriarchal system is dominant, this influences female progression in the workplace, Zhao and Lord (2016). They illustrate the general Chinese work-life where the traditional Chinese patriarchal culture overrides women’s mobility to higher levels in organisations, which makes women feel more subordinate and less confident at work and expected to confine themselves to the home. Zhao and Lord (2016) illustrated that, in Chinese culture, women made decisions based on how males influenced them, and this directed how they operated both at home and work.

The African continent is explored in the next section, focusing on two African countries only, namely, Kenya and Nigeria. They are amongst the technological leaders in Africa, and a comprehensive section on the South African Information and Communications Technology workforce profile is also explored.

2.3.5. Africa

In Africa, the most widespread challenges lie in infrastructure, energy constraints, and the ICT skills gap between men and women. These indicated challenges impact users and the pool of available skilled labour, for organisations doing business in Africa. The African continent has been making great strides in Information Communications and Technology and is potentially transforming the way business is conducted. Even though of late Africa has seen fast development in Information and Communications Technology, women are still seriously underrepresented in innovation.

Kenya and Nigeria will be explored in this section. Chakravorti, Tunnard, and Chaturvedi (2015) stated that the Harvard Business Review included Kenya, Nigeria, and South Africa in its global list of the fastest-moving digital economies. For this reason and the purposes of this study, these three countries will be looked at in the following section.

Ndung'u, Lewis, and Mothobi (2019) stated that Kenya is well-positioned in the digital economic space, with e-commerce starting to take off. Several innovation hubs and Fintech platforms offer services, not just in the region but globally.

In Kenya, Akamanzi, Deutscher, Guerich, Lobelle, and Ooko-Ombaka (2016) reported that the ICT services sector had also grown faster than all other Kenyan economic sectors in the first decade of the 21st century. More recently, the ICT competitiveness in the Africa Report (2019) stated that Kenya had made great strides in ICT development in the past few years and is now considered a leader within Africa. The government's focus on developing an ICT-enabled country contributed to developing a robust ICT landscape. Science, Technology, and Innovation (STI) are core pillars of Kenya's Vision 2030 plan.

In Kenya, the UNESCO Science Report (2015) reported that although Kenya's technology sector was still in its infancy, it was considered the tech hub of sub-Saharan Africa. However, Njoki, Wabwoba, and Micheni (2016) found that a substantial gap existed between men and women in ICT careers. Kenya had fewer women joining the ICT field and experienced low retention rates of women in the field. Furthermore, individuals who had studied ICT left to join other fields, and there were limited numbers of women in management positions.

In interviews conducted of women who were either managing in ICT firms in Kenya, Powell and Chang (2015:5) reported that "the fear of mathematics and sciences instilled in girls which were important in the pursuit of technology had been instilled in women and as a result, there are negative attitudes instilled during socialisation at home or school and in addition, ICT courses tend to be costly and 'dominated by men.' Powell and Chang (2016) also found that women in ICT credited their success to parental support, motivation, and mentors' influence—mostly men—who already worked in ICT fields, despite the gender barriers.

The next African country to be explored is Nigeria. The country shows a high commitment to ICT development in the form of an ICT road map 2017-2020. The National Bureau of Statistics (NBS) of 2018 reported that, in 2017, Nigeria's ICT sector accounted for 11.27% of national GDP and attracted 35% of the cumulative FDI between 2001 and 2017 (NBS, 2018). In addition to the ICT developments in Nigeria, Gillwald, Odufuwa, and Mothobi (2018: 17) highlighted that "the Nigerian ICT Roadmap 2017–2020 was initiated in 2017." Gillwald et al. (2018) state that the Federal Government of Nigeria outlined an Economic Recovery and Growth Plan that placed the central government's role in economic growth and development. The Roadmap, according to Gillwald et al. (2018), additionally offers strategies for a multi-

stakeholder approach to ICT sector development, in order to promote national development through the inclusion of women, the youth, and vulnerable groups.

An early study by Alutu and Audu (2009) looked at the participation of women in Nigeria's technological development as an indication for the need for early career guidance. They found that many women (80%) were interested in ICT, but only 60.67% had access to it. The constraints identified by their study were time, gender roles, work-life imbalance, and inadequate training and empowerment initiatives. Later on, a study by Ojokoh (2010) proposed practical steps that could be taken to empower women, especially using ICT. The study by Ojokoh (2010) highlighted such issues as using ICT as a lever for the reduction of gender inequality, promoting women's participation in IT at the community level, educating women and girls for IT, and roles for governments and the civil society in improving and increasing women's participation in IT.

In a world where all aspects of the Information Communications and Technology sector are part of daily life, for Africa it is crucial socially and economically, to keep up to date with the rest of the world. Information Communications and Technology has been a significant economic force in sub-Saharan Africa in the wake of the 4th Industrial Revolution (4IR), and women in some developing countries are taking advantage of ICT and entering the new workforce it creates. The next section deals with the profile of the South African ICT workforce.

2.4. Profile of the South African Information and Communications Technology work force

This section looks at South Africa because it is the setting of the current study.

The ICT sector in South Africa is one of the biggest employers and the largest contributors to the economy. In 2018, the telecommunications sector showed the highest year on year growth, increasing 14.4% to R187 billion in 2018. Total employment in the industry increased by 18.8% in 2018 (Malinga, 2019). The start of the 20th century signaled an increase in the number of women entering professions previously reserved for men (Du Plessis & Barkhuizen, 2015). However, women still only occupy 23% of job roles in the ICT sector (Seбата, 2020).

South Africa is a net importer of telecoms equipment, importing more equipment than it exports. According to findings by Kneale (2017), South Africa's ICT imports exceeded exports by a factor of four to one. According to the Conference on Trade and Development (2018), it was stated that South Africa's telecommunication equipment importation was reported at

3,291,4000,663 US dollars in December 2018. In 2007, the South African government adopted an ICT Research and Development Strategy and established the Johannesburg Centre for Software Engineering (JCSE) with support from regional, local governments (Esselaar, Gillwald & Stork, 2007) and the ICT industry, as well as the Meraka Institute (Fraser-Moleketi, 2008), with resources from the state fiscus. The Meraka Institute emerged from a long history of ICT R&D at the CSIR (Gedye, 2010) and conducted research and experimental development in four broad fields, namely cyber-infrastructure, imaging and networks, systems engineering, and applications.

However, in 2020, the ICT sector is probably still several decades away from making a significant contribution to local needs, or to making the country a significant player in the global ICT R&D sector.

Calitz, Evert, and Cullen (2015) reported that South Africa experienced an Information and Communications Technology (ICT) skills shortage, and a limited number of scholars and students pursuing ICT careers. Also, Powell and Chang (2016: 6) highlighted that “women entering the ICT sector in South Africa faced challenges such as work-family balance issues, the undervaluing of women’s contributions at work, adverse stereotypes of women, the relative absence of women role models, re-entry difficulties because of the rapid pace of change in ICT, and a lack of guidance on career options.” Despite all the challenges, according to Rykklief (2018), the ranking of South Africa by the 2016 World Economic Forum (WEF) Networked Readiness Index (NRI) placed South Africa as 65th out of 137 countries for ICT adoption, which was an improvement of ten places since 2014.

Lagerberg (2015) found that women were generally under-represented in the technology, or ICT industry in South Africa. The numbers dwindled as they advanced to senior management, with only 19% of senior posts assumed by women. The World Development Report (2019) showed that men outnumbered women in every occupation. Only about a quarter of managers are women, and women are about 39% of professionals. Chisiza (2017) argued that the gender digital gap was glaring in the South African workplace. Rarely, young girls who desired a career in technology had support from their families or their schools, and without the encouragement, they run the risk of losing interest in this field.

Ashcraft, McLain and Eger (2016) reported that studies have shown that, despite fewer talented women in technology than men, many of those who were qualified were still not hired. A recent study by Chisiza (2017) also reported that in South Africa 22% of computer science graduates

were women, yet only 2.9% of them found jobs in technology. Due to the limited numbers of women in ICT-related jobs, women were more likely to be left behind in the advent of the 4th Industrial Revolution because of resultant new technologically driven jobs.

Pretorius, Mawela, Strydom, de Villiers, and Johnson (2015) cited that the interpretive analysis of the women's experiences in the IT industry internationally advanced two essential facts. The first was that the IT industry demanded continued upgrades in education. The second was that women battled to find enough time to keep up with the demanding IT industry, especially if they had families. Pretorius et al. (2015) further reported that, in the online survey, 87% of the South African women respondents indicated that they found the IT industry challenging rather than chaotic. The respondents indicated (58%) that the biggest challenge lay in finding time for the continuous education required to keep up with the ever-changing IT industry. Almost all the women agreed (97%) that the IT industry was demanding and required ongoing investment in upgrading their education and time.

According to the WEF report (2018), in South Africa, females' proportion to males who graduated with STEM-related (Science, Technology, Engineering, and Mathematics) degrees was out of kilter. Women were under-represented in maths and statistics (4:5), ICT, and technology (2:5), as well as engineering, manufacturing, and construction (3:10). Consequently, a notably smaller pool of female STEM talent restricted women's growth and development in the South African context. In an earlier study by Pretorius et al. (2015), it was found that there were other factors that women in the South African IT industry faced, which made the industry challenging. Four (4%) indicated pressure/stress, and a male-dominated environment that made their career growth extremely difficult. Sixty-one (61%) of the women respondents indicated that they had less time to spend on the IT industry than their male counterparts, while thirty-one (31%) did not have a definite answer. The situation could be attributed to family responsibilities shouldered by women.

This current study's focus is South African female ICT professionals, and a study by Tiainen and Berki (2019: 170) asserted that "women's under-representation in the fields of science and technology was substantial." The South African Employment Equity Act No. 55 of 1998 articulated that organisations ensure a diverse workforce representative of the country's population. A 2017 survey of the ICT workforce indicated that employment figures in the ICT sector were skewed more favourably towards men (SA Stats, 2017). This scenario was an imbalance, as Schofield (2017) asserts that more than half of the South African workforce consisted of women. Ryklief (2018) stated that the ICT skills landscape remained an object of

conflicting reports in South Africa. Paradoxical views described South Africa as either facing a critical shortfall of skilled ICT professionals or oversaturated with qualified ICT professionals.

In South Africa, women in male-dominated occupations such as Science, Engineering, and Technology (SET) continued to face several unique and challenging situations stemming from organisations' gender norms and assumptions (Cervia & Biancheri, 2017; Herman, 2015; Herman & Lewis, 2012). Although female graduates entered the job market in the same numbers as their male counterparts (Thornton, 2014), men were nine times more likely to reach senior management positions than females. A recent study by Hari (2017) confirmed that male dominance, in terms of sheer numbers and decision-making power, ensured the maintenance of masculinist practices in the workplace, which further restricted women's opportunities in SET professions.

Demerouti, Derks, Brummelhuis, and Bakker (2014) mentioned that the new methods of work brought about by ICT introduced three critical characteristics to employees' functions. ICT provided employees with flexible working hours; secondly, with flexibility regarding their workplace and, finally, various options for communication with co-workers, supervisors, and clients. All the characteristics mentioned above had the potential for ICT to cause an invasion into employees' family domains. Although most researchers identified ICT as contributing to work-life interference, Demerouti et al. (2014), Jensen (2013) & Mieczakowski, Goldhaber, and Clarkson (2010), as well as Gajendran and Harrison (2007), found that ICT (especially, telecommuting brought about by ICT), to a small degree, contributed to work-life balance.

Having explored the profile of the South African Information and Communications Technology workforce, the next section looks at employment in the South African information and communications technology sector.

2.4.1. Employment in the South African Information and Communications Technology sector

In this current study, it is essential to understand employment levels in the Information and Communications Technology sector, and the following section provide this information.

According to StatsSA (2015), the ICT sector employed 335 000 people in the 3rd quarter of 2015. Less than a third (31%) of the employees in the ICT sector were female. As shown in figure 2.1 below, more than a third worked in computer software and services, while less than a third worked in telecommunication services.

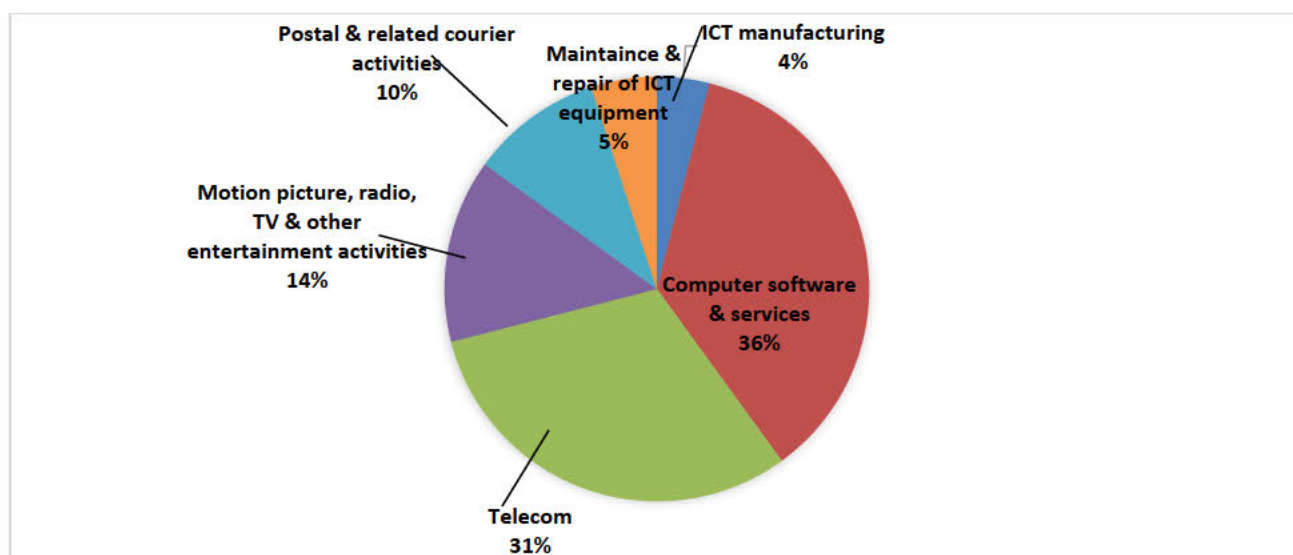


Figure 2. 1: Employment in the Information and Communications Technology Sector

(Source: StatsSA Labour Force Survey 3rd Q, 2015)

Figure 2.1. shows the employment in the Information and Communications Technology sector indicating the following:

- Postal and related courier activities at 10%, denoting a population of 34,973;
- Maintenance and repair of ICT equipment at 5%, denoting a population of 17,710;
- ICT manufacturing 4% denoting a population of 13 065;
- Computer software and services at 36% denoting a population of 120,055;
- Telecom at 31%, denoting a population of 103 317;
- Motion picture, radio, TV, and other entertainment activities 14% denoting a population of 45 934.

Studies on the ICT sector's profile revealed a predominance of male workers, particularly in the core ICT workforce and at the more senior levels. Statistics indicated that women in South Africa made up a mere 20% of the ICT sector workforce instead of the 56% representation globally (SA News, 2016). According to the Media, Information Communication Technology (MICT) report for 2015, male dominance was still evident at 65% for more technical skills in Electronics, IT, and Telecommunications, while female dominance was apparent in the Advertising and Electronic Media and Film sub-sectors (MICT SETA, 2015). Research by Du Plessis and Barkhuizen (2015) also found that women's participation in science, engineering, and technological careers had significantly increased over the last 20 years.

Based on the previous statements, it was established that the Information and Communications Technology (ICT) in South Africa was well developed. The issue rested on developing a well-established ICT strategy incorporating all that operate in it, especially females in the Information and Communications Technology (ICT) profession. Thus, the importance of gaining a good understanding of the female professionals 'experiences engaged in ICT, in terms of how they balance their work lives in a demanding field such as Information and Communications Technology (ICT).

The link between Information and Communications Technology (ICT) and telecommunications is that Information and Communications Technology (ICT) is an extensional word for Information Technology (IT). Information and Communications Technology (ICT) emphasises the role of unified communications, (examples including instant messaging, voice and data communications), as well as the combination of telecommunications (telephone lines and wireless signals), including computers, relevant enterprise software, middleware, storage, and audio-visual systems, that allow operators to access, accumulate, disseminate, and use information. A telecommunications organisation was the setting for the current study, so it was imperative to discuss the South African Telecommunications industry.

The next section looks at the South African Telecommunications industry.

2.4.2. The South African Telecommunications Industry

The International Telecommunication Union (2012:5) defines "telecommunication as any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems." Kaur (2015) reported that advances in telecommunication infrastructure have led to deep-seated changes and global liberalisation. Kaur (2015) also added that as the telecom sector grew it impacted the growth of other sectors through the dissemination of information and ideas. Kaur (2015) rightly put it; a modern telecommunication infrastructural development was essential for developing various services including finance, insurance, banking, real estate, hotel, tourism, and restaurant services. Moreover, regulatory and institutional reforms in the telecom sector have had a fundamental effect, reduced cost of transportation, faster information exchange, and the protection of consumer's interest.

An early study by Jamison, Sanford, and Liangliang (2009) advised that telecommunications were a key facilitator of economic growth. As such, countries cared about competitive outcomes in this market. Competition works in telecommunications, could result in expanded

services, lower prices, and a stimulation of innovation. Kaur (2015) expanded on Jamison et al.'s (2009) viewpoint by stating that the telecommunications world had changed rapidly due to convergence between telecommunication, broadband communication, and Information Technology. Therefore, in recent times, advanced technologies had become the driver of economic growth.

The Global Information Technology Report (2013) ranked South Africa using criteria that examine the level of importance a government places on ICT policies. According to a report by the World Economic Forum of 2013, the perception of a lack of clear government vision (105th) to orchestrate and implement a holistic ICT strategy for the country plays negatively and outweighs a relatively positive political and regulatory framework for ICT development (21st) and [the] pro-business environment (55th).

The South African Telecommunications industry is governed by a set of legislation. In the South African context, the telecommunications legislation is relevant in terms of its provision of pieces of legislation that govern how telecommunications-related aspects are organised. The pieces of legislation in South Africa are provided in table 2.1.

Table 2. 1: Telecommunications legislation in South Africa

<i>Year</i>	<i>Short Title</i>	<i>Principal measures</i>
1952	Radio Act	Amended in 1957, 1962, 1963, 1969 and 1974
1958	Post Office Act	Powers of South African Posts & Telecommunications (SAPT)
1974	Post Office Service Act	Reform of the Posts and Telecommunications
1991	Post Office Amendment Act	Separation of Posts and Telecommunications. Freeing postal services and telecommunications from the perceived burdens of ministerial control.
1993	Independent Broadcasting Act	Creation of the Independent Broadcasting Authority (IBA)
1993	Multiparty agreement	Framework for mobile licences, including community telephones
1994	Mobile licences	GSM licences issued to Vodacom and to MTN.
1996	White paper (RSA, 1996)	Policy framework
1996	Telecommunications Act	Ministerial discretion over when and if markets would be opened to competition. 4+1-year exclusivity for Telkom in fixed networks. Creation of SATRA. Repeal of a range of existing statutes.
1996	Sentech Act	Conversion of Sentech from a subsidiary of SABC into a corporation. Carriers' carrier for TV and radio stations.
1997	Telkom licence (DOC, 1997)	Initial monopoly on fixed networks.
1999	Sentech Amendment Act	Enabled private shareholdings in Sentech
2000	ICASA Act	Merger of SATRA with the IBA to create ICASA

(Source: Sutherland, 2014: 8)

The regulatory environment in South Africa rapidly changed following legislative changes such as the Electronic Communications Act Amendment Bill, the Competition Amendment Bill, and regulatory inquiries on the market structure in terms of communication services and their prices. The Electronic Communications Act Amendment Bill proposed legislation around creating the wireless open-access network, wholesale open-access, rapid deployment of infrastructure, terms and conditions for licensees, universal service obligations, and assigning spectrum (Telkom Integrated Report, 2018). As a result of the legislation governing the labour market in South Africa, as of the 30th September 2015, the total number of employees reported for the three sectors that ICASA regulated was 58 411, with 41% female. ICASA (2016) reported that the telecommunications sector employed 53%. An additional 37% of all people employed in the telecommunications sector were females, whereas the TV broadcasting sector's corresponding ratio was 48% and SA Post Office at 45%.

2.4.3. Employment in the South African Telecommunications Sector

A more specific address of the employment statistics in the Information and Communications Technology sector, specifically in the telecommunications sector, was needed to put this study into context, and the next section looks at that.

As of the 30th September 2015, the reported number of people employed in the telecommunications sector was 30 519, of which 11 173 (37%) were female.

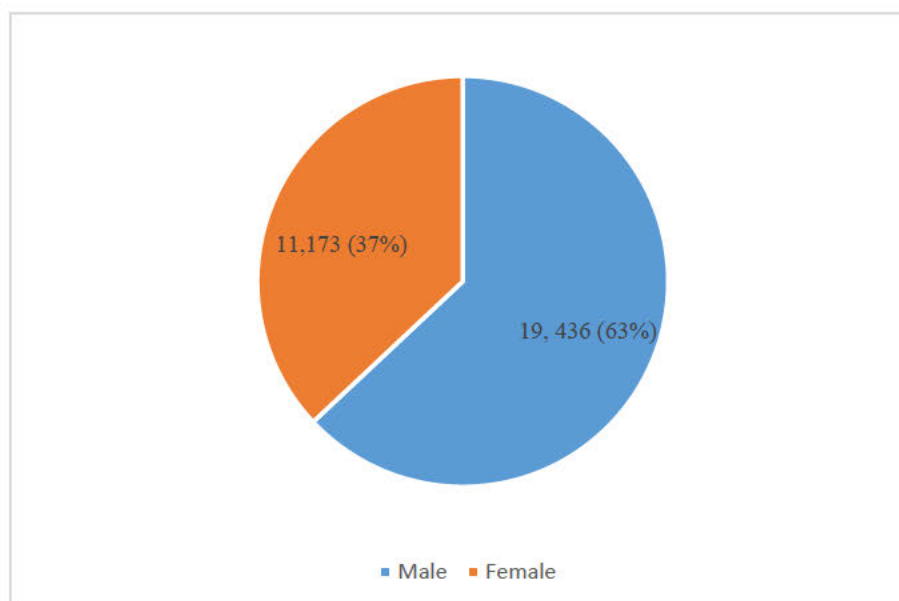


Figure 2. 2: Persons employed in the Telecommunications Sector, by gender, as of the 30th September 2015

(Source : ICASA Electronic Communications Questionnaire, January 2016)

The previous figure gives the percentage (37%) of females compared to males (63%). For this reason, this study was important to understand the work-life balance experiences of the females employed in this male-dominated sector. The underrepresentation of women in the ICT industry highlights a global problem in the ICT domain for both practice and research. The next section looked at career challenges for women in the South African Information and Communications Technology sector, which could explain why women were so few in the Information and Communications Technology. The next section looked at challenges or barriers women faced in the South African Information and Communications Technology sector.

2.5. Challenges or barriers women face in the South African Information and Communications Technology sector

There are numerous challenges or barriers that women face in the South African Information and Communications Technology sector. As reported by Herman and Lewis (2012), Herman (2015) and Cervia and Biancheri (2017), women in male-dominated occupations such as Science, Engineering, and Technology (SET) continue to face several unique and formidable challenges that all stem from gender norms and assumptions in these organisations. Among organisations dominated by men, and as Gaines (2017) points out, men have more power and influence over decisions, which may significantly affect women. Although past discrimination against women is changing, women still face various challenges in their roles dominated by men. As women, many can feel incompetent, mistreated, and inadequate in a world dominated by men, seeking support from their colleagues.

The World Economic Forum Report of 2019 reported that, in South Africa, the challenge stemmed from the foundation which showed that the proportion of females to males who graduated with STEM-related degrees was at an imbalance. This scenario was not unique to South Africa but a global problem. The WEF Report (2019) showed that in mathematics and statistics, there were only 4.5% female students, and in engineering, there were only 3.10%, which in turn reflected in the number of women in Science, Technology, Engineering, and Mathematics (STEM), and further impacted the growth of the South African labour force in the sector. Sorgner, Bode, Krieger-Boden, Aneja, Coleman, Mishra, and Robb (2017) stated that gender gaps and unfavourable policies further compounded the South African situation, as these created broader gaps in higher education, which were insufficiently addressed by governmental programmes.

The perception that the Information and Communications Technology sector is a masculine sector has compounded women's challenges in South Africa and the world over discouraging them from entering this sector. Pretorius et al. (2015) reported that 82% of respondents believed that the South African Information and Communications Technology industry had advanced a masculine culture. The respondents attributed it to the technical and male-friendly nature of the skills required in the ICT industry (21%), and dominantly male management teams (11 percent), promoting fewer growth opportunities for women. The respondents added that, traditionally, ICT was perceived as a male industry (8%), which led to the exclusion of women from social networks in the ICT industry, which was dominated by men (8%). In other words, women seldom felt included in the ICT industry culture. The study by Pretorius et al. (2015) found that women shared a similar perception, internationally and in South Africa, that the ICT industry was functional, logical, task orientated, consisting mainly of programming and building hardware (computers and networks). This scenario detracted many women from pursuing jobs in the ICT field, had them believing they were better off doing 'softer,' non-technical jobs and tasks. In other words, the diverse nature of the ICT industry was not well understood by women.

One way to change this situation was for women to break the barriers in the male-dominated IT industry, by getting involved in the many aspects of the IT industry, such as sociocultural factors, education, male-dominated social networks, and executive management. More women in executive roles could contribute to making the IT industry more suitable for women. Du Plessis and Barkhuizen's (2015) findings in South Africa showed that a lack of training, poor talent management and a lack of mentorship were some of the most prominent career barriers to women. Additionally, Du Plessis and Barkhuizen (2015) stated that because of family commitments, women in STEM occupations found it more challenging to upgrade their skills through education and training, and ended up ill-equipped, such that they often remained in secondary positions in the labour force. This view was supported by Pretorius et al. (2015), who asserted that women in the ICT industry did not have the time to keep up to date with the constant demand for re-training and new educational requirements, while at the same time managing ongoing changes in their households.

Pretorius et al. (2015) also found that women were hesitant to get involved in the IT industry because of the industry being associated with working long hours and continuous learning. This situation stood at odds with women's traditional roles as homemakers, and often led to work-home conflicts. It could be challenging for women to try and change this socially constructed norm influenced by cultural context.

As alluded to earlier, in South Africa, women are grossly underrepresented in the Information Technology (IT) sector because of gender stereotyping and discrimination. According to the Independent Communications Authority of South Africa (ICASA) Report (2017), only 21% of the IT sector executives were women, which contributed to the high unemployment of women IT graduates. The challenge of discrimination and stereotyping is deeply-rooted in South Africa, although there is legislation, like the Employment Equity Act 55 of 1998, which looks after the welfare of workers. James, Smith, Roodt, Primo and Evans (2006) highlight that, during South Africa's past, women of all races were barred from achieving their full economic potential due to both legislative and non-legislative discrimination. As a result, few women hold senior positions in government and industry.

Catalyst (2014) reported that there was still a perception that men were more skilled at computer work, were better managers and leaders than women, and it was this view which influenced women to be satisfied with being computer users rather than developers, systems analysts, or ICT managers.

As early as 2012, Vorster (2012) reported that, as gender equity remained a significant problem in South Africa, recruitment companies needed to take more extraordinary steps to push top women candidates' appointments into senior management positions in South African companies. In this article, Vorster (2012) stated that a small pool of top women executives ended up being moved around like chess pieces, with few newly qualified candidates being brought into that corporate sector. Louw-Harmse (2015:36) highlighted that finding the right-skilled IT professionals, shortage of qualified, experienced personnel, and organisations' unwillingness to appoint women into senior positions were the main challenges females faced in the ICT sector.

A survey by ICASA (2017) in the technology sector found that men outnumbered women at every level, and more so at higher management levels. The report adds that with only 21% of executives in the Technology sector, women's career advancement suffered grievously from the gender digital divide problem. Women in South Africa were said to be facing numerous barriers in breaking into the IT labour force.

As recent as 2018, despite their levels of educational attainment and experience, women were still stereotyped. A recent article on female engineers, published in the July 2018 edition of Civil Engineering, and on the LinkedIn page of Manglin Pillay ("Pillay"), received backlash describing it as misogynistic and offensive. Pillay, who was the CEO of the South African

Institution of Civil Engineering (SAICE), asked whether South Africa should be investing heavily in attracting women into Science, Technology, Engineering and Maths (STEM) fields (Shange, 2018). Manglin Pillay contended that research indicated that women were drawn to more people sensitive careers, and people-focused work, and therefore queried the wisdom of investing in women in Science, Technology, Engineering, and Maths (STEM) fields.

The gravity of Manglin Pillay's opinions and misunderstanding of the research article he referred to was concerning, not only because of his role as a leader but also because his opinions indicated deeply rooted, negative gender biases that still promoted barriers, challenges for women in the ICT workplace. Regter (2018) reported that South Africans called on Pillay to step down. Initially the board of SAICE had accepted Pillay's apology, and retained him as CEO, citing his invaluable contribution to the engineering sector. This development enraged South Africans, specifically female engineers, as the apology did not in any way address the issue at hand, and so this led to a public outcry on the matter, which forced Pillay to resign as the CEO of SAICE on 6 September 2018.

This practical incident illustrated one of the critical issues that women need to address regarding inclusion, specifically gender equality in the South African Information and Communications Technology sector. These elements embody the conscious (explicit) and unconscious (implicit) bias that women face, the role of leadership in creating the appropriate culture in organisations, how governing structures view the wrongdoings of men versus women, and finally, how the unorthodox voices of women and men are capable of bringing about desired change.

In terms of leadership challenges, Meela (2018) indicated that the representation of female Information Technology Executives in South Africa was far from ideal. Research showed that there were more women in Information Technology management support functions than in leadership roles. Even though every year, the total number of Information Technology Executives profiled had increased, from 153 in 2011 to 172 in 2016, only 10% of them were female, despite women comprising the majority of South Africa's population. Fajardo and Erasmus (2017) stated that, crucially, in South Africa, women were often more ambitious than men at entry-level, with 58% of women aspiring to reach senior management, compared to 48% of men, but their confidence in this aspiration was broadly similar.

In summary, the Competition Tribunal of South Africa (2009) described the South African ICT sector as follows: the ICT market is broadly divided into four tiers, namely IT application services, IT hardware, network services, and telecommunication infrastructure.

The first tier, which is application services, provides software-related services grouped into development and support. The second tier is IT hardware, which involves reselling, installation, and management of hardware. The third-tier network services consist of connecting and managing local area networks (LAN), wide network areas (WAN), internet access, and other internet services. The fourth and last tier is the telecommunications infrastructure, categorised as transmission services and access connections.

2.6. Conclusion

In conclusion, chapter two presented the first part of the literature review. The Information and Communications Technology sector put the study into context, followed by a section on female Information and Communications Technology professionals in South Africa. To bring this study into perspective, a global perspective of the Information and Communications Technology Sector looked at the following regions: Europe, South America, Middle East, Asia, and Africa. Sections on the South African Information and Communications Technology workforce profile, employment in the Information and Communications Technology sector, the South African telecommunications industry, and employment in the South African telecommunications sector followed. Finally, a section on the challenges or barriers women face in the South African Information and Communications Technology sector was explored.

The following chapter (3) will provide an in-depth analysis of existing literature of the theoretical frameworks that were used to provide the theoretical and empirical foundation for this study. The two theoretical frameworks used were, The Life Course Perspective (Giele & Elder, 1998) and The Border Theory (Clark, 2000).

Chapter 3

Theoretical foundation of the study

3.1. Introduction

The previous chapter served to present the first part of the literature review. The current chapter presents the second part of the literature review, which is focused on the theoretical foundation of the study. Chapter 3 served to provide an in-depth analysis of the existing literature of the theoretical frameworks used for this study, and this was done by thoroughly examining the critical tenants of the theoretical basis of the construction of the framework for measuring the work-life balance of Information and Communications Technology (ICT) female professionals.

In the current chapter, the theoretical foundation of the study is presented as follows:

1. Theoretical foundations
2. Theoretical frameworks used for this study
3. The Life Course Perspective (Giele & Elder, 1998)
4. The Border Theory (Clark, 2000).

3.2. Theoretical foundations

In this section, the theoretical foundations of the two frameworks used for this study, which are the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000), are discussed.

3.2.1. The Life Course Perspective (Giele & Elder, 1998)

The life course approach is still in its infancy and has seldom been considered by scholars in South Africa. Therefore, this approach's power as a framework for studying women's experiences in the male-dominated industry adds value and is key to this research's novelty. The discussion starts with the Life Course Perspective (Giele & Elder, 1998), followed by the Central tenants of the Life Course Perspective (Giele & Elder, 1998), then limitations and strengths of the Life Course Perspective (Giele & Elder, 1998) and finally a discussion of gender differences in life course experiences.

According to Castaño and Webster (2011), for this study, understanding a 'life course' approach to the understanding of women's trajectories through ICT studies and careers,

situated in the structural and cultural contexts within which these trajectories unfold. This approach has several advantages:

- it allows us to identify the main factors affecting women's engagement in ICT at different points in their lives;
- it highlights the critical transition and attrition points in women's lives, and it shows how their career patterns are shaped by domestic labour and workplace factors.

It crucially recognises the role of women's own choices as they shape and respond to their situations.

The Life Course Perspective (Giele & Elder, 1998) emphasises the importance of the broader social and historical influences, human agency, and the bi-directional relationship between individuals and their settings. The Life Course Perspective (Giele & Elder, 1998) also draws attention to the timing of exposures, events and transitions, or changes in individual status and roles along the course of life (Elder et al., 2003). Pioneers of life course research, Giele and Elder (1998:19) argued that any point in the life course could be "viewed dynamically as the consequence of experience, and future expectation as well as the integration of individual motivation with external constraint."

In the next section a discussion on the central Tenets of the Life Course Perspective (Giele & Elder, 1998) follows.

3.2.2. Central Tenets of the Life Course Perspective (Giele & Elder, 1998)

Hutchison (2008:33) is of the notion that "as a framework for thinking about the aspect of time in human behaviour, the life course perspective has several advantages over traditional theories of human development. It encourages greater attention to the impact of historical and social change on human behaviour, which seems particularly important in a rapidly changing society such as ours." Concepts like human agency, linked lives, location in historical time, space, and timing are also discussed in the following sections.

Trajectories: Li, Cardinal, and Settersten (2009) are of the view that long-ranging developmental trajectories chart the course of biological, behavioural, psychological, or social states. Li et al. (2009) continue to say that trajectories can be described based on timing (when changes of state occur), sequencing (the order in which different states occur), duration (how long a state endures), spacing (the amount of time between experiences) and density (the number of experiences within a fixed period. Wethington (2005) states that segments of

trajectories of health behaviours are characterised by inertia, where behaviour is resistant to disruption. Figure 3.1. shows the Life Course Perspective (Giele & Elder, 1998).

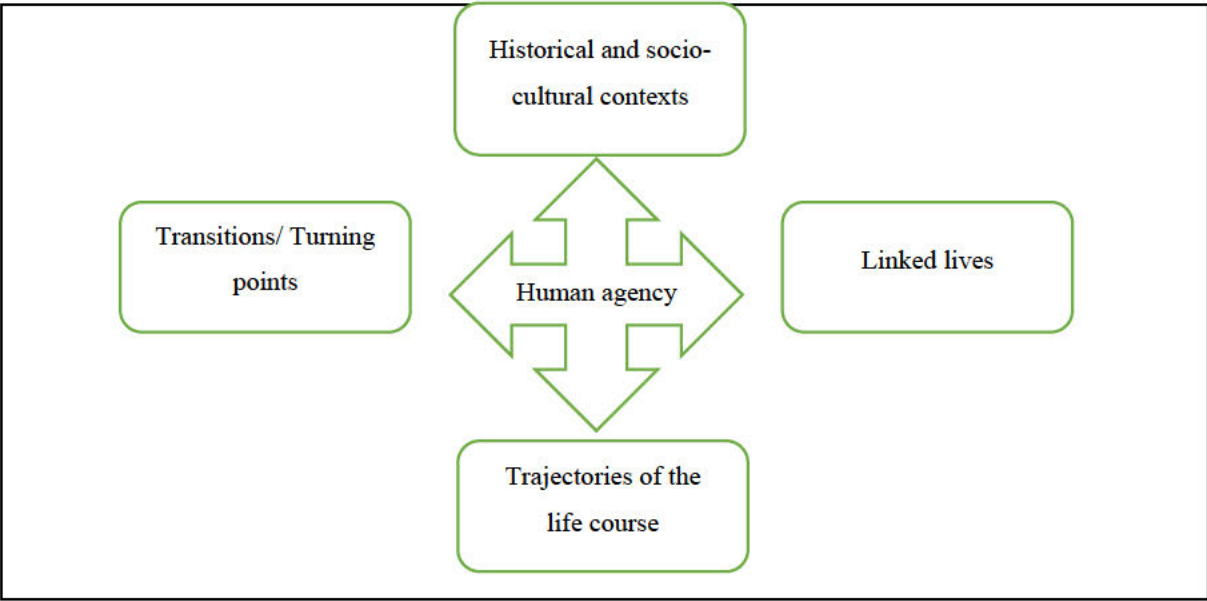


Figure 3. 1: Life Course Perspective (Giele & Elder, 1998)

(Source: Giele and Elder, 1998: 145)

Transitions: Transitions refer to abrupt or gradual changes, in state or role that impose inflections on trajectories. Role transitions are often accompanied by the endowment or relinquishing of responsibilities and movement in or out of social settings (Settersten, 2003).

Turning points: Turning points enforce a more marked and distinct nuance on a trajectory. Wheaton and Gotlib (1997) identified a turning point when the probability of future outcomes is altered. Wheaton and Gotlib (1997) further explain that an individual may identify a turning point while reviewing their life as a point that demarcates the trajectory as ‘before’ and ‘after.’

Human Agency: Individuals possess agency within their life course, constructing their life course through choices and actions (Elder, 2003). Jones (2013:24) reported that “using cognitive, social and psychological resources, individuals decided and pursued courses of action within the opportunity structure of their circumstances.”

Linked lives: According to Haustein, Klockner, and Blobaum (2009), interpersonal relations and social integration in family, school, workplace, and community, influenced how an individual life course unfolds. Inter-generational relationships within families, specifically parent-child relations, could be significant and longstanding forms of inter-personal relations. Haustein et al. (2009) were furthermore of the view that parents transferred to their offspring

various forms of resources that influenced development. The most direct form of transfer was genetic inheritance, while cognitive, social, and psychological resources were transferred in the acquisition of behavioural and emotional styles and attitudes.

Location in historical time and space: Pioneers of life course research note that the framework had a dialectical perspective related to social history and individual biography (Giele & Elder, 1998). Additionally, Jones (2013) stated that this emphasised that the life course was rooted in, and fashioned by, historical time and geography. Individuals alive at the same time were likely to encounter the same historical events and conditions; however, birth cohorts were united by an experience of those events at the same age.

Timing: Ganz, Desmond, Leedham, Rowland, Meyerowitz, and Belin (2003) cited that the determinants and impacts of a life event or transition could vary according to their timing in the life course. For instance, older survivors of breast cancer would less likely than younger survivors, report a positive impact of their illness on their physical activity levels. Jones (2013:26) mentioned that “different birth cohorts encountered different societal contexts for walking and cycling throughout their lives, due to macro socio and structural changes, and therefore an understanding of whether life-course patterns of walking and cycling were changing in the succession of cohorts required longitudinal data on individuals from different cohorts.”

Having explored the central Tenets of the Life Course Perspective (Giele & Elder, 1998), the following section looks at the limitations and Strengths of the Life Course Perspective (Giele & Elder, 1998).

3.3. Limitations and Strengths of the Life Course Perspective (Giele & Elder, 1998)

George (1993) reported that, despite the innovative features of the Life Course Perspective (Giele & Elder, 1998), its detractors focused on the challenges inherent in this sociological approach. One challenge was the difficulty that heterogeneity posed to studying sociological phenomena. Bengston and Allen (1993) further acknowledged that one had to examine both modal (average) configurations and diverse arrangements to undertake life course analyses effectively. George (1993) illustrated this point by citing a study conducted by Rindfuss, Swicewood, and Rosenfeld (1987) that examined the different pathways people took following their high school graduation. They found that the number of different pathways were too numerous to examine each separately and collapsing the pathways into a dichotomy would be

imprecise. Instead, they identified five possible sequences (work, education, homemaking, military).

A recent study by Bernardi Huinink and Settersten (2019) found that the unveiling of different types of temporal interdependencies such as ‘anticipative’ or ‘path dependence’ mechanisms (e.g., steps facilitating or hindering the experience of specific events). A mix of the two came at a cost because considering the trajectories as a whole, without any simplifying assumptions on their unfolding mechanism poses, presented some problems the possibility of handling trajectories only partially observed, and studying the impact of time-varying covariates on life courses.

Nevertheless, according to Heinz, Huinink, Swader, and Weymann (2009), the Life Course Perspective (Giele & Elder, 1998) gained prominence as a sociological research method field of medical sociology. The results of long-term longitudinal studies have contributed significantly to sociological knowledge of the interplay between societal change and individual health trajectories. Studies by Bernardi and Klärner (2014) & Thrash and Warner (2016) asserted that the interplay between the micro and meso levels revealed how individual trajectories were shaped by support, shared meaning, and normative influences. Thrash and Warner (2016) asserted that research had examined the extent to which individuals’ resources and the uses that could be made of them were affected by immediate social environments, such as nuclear or extended family networks, communities, peer groups, school, and working climates.

In the next section, gender differences in life course experiences are discussed.

3.4. Gender differences in life course experiences

Studies by Lörz and Mühleck (2019) show that gender differences in academic achievement are more pronounced at the academic career beginning and tend to diminish over time. Men and women are different in starting or ending academic careers, with family circumstances playing a significant role. An earlier gender study by Rehman and Roomi (2012) of females also reported that in some circumstances managing professional and business commitments becomes even harder where both roles interfere with each other. Mackenzie (2014) furthermore contends that, the extent to which the women in the current study were able to act on their changed perspective by reorienting priorities and adjusting boundaries between work, family and care for the self was largely dependent on their daily lives; their household socio-economic circumstances, their identities as mothers and workers, and the support they received from their partners and their workplaces.

Singley and Hynes (2005) mention differences between genders. Their study affirmed that differences in mothers' and fathers' access to paid time off from work interacted with their parenting role ideologies to influence gender differences in paid work arrangements during the period immediately around a birth. After the initial transition, employed women used and created more flexibility in their work arrangements than their husbands, often reducing their husbands' need to use available work-family policies. According to Krecker (1994) and Moen, Dempster-Mc-Clain, and Williams (1992), research suggested that employees could take on a different meaning for women than men. In contrast to men, women's work was more strongly influenced by experiences in other (non-work) life domains, such as the timing and nature of family transitions. Thus, women workers' tendency to confront more work-family roles manipulating than their male counterparts would do (Cox & Harquail, 1991; Hochschild, 1989). Women were more apt to use family-related benefits (Greenberger, Goldberg, Hamill, O'Neil & Payne, 1989). Differences in how women and men tend to experience and relate to work and non-work issues, and the implications of those differences for employee loyalty, have only recently received significant attention in the management literature. As researchers began to address gender differences, male samples' typical pattern was not consistently found among females. For example, Lynn, Cao, and Horn (1996) found that commitment to career varied across career stages for men but not for women.

Contradicting the gender stereotyping of technical skills as 'hard' and masculine and interpersonal skills as 'soft' and feminine, research shows that managerial skills (which are arguably 'soft' and interpersonal) are gender-typed masculine as well. Lyons, Sweitzer, and Ng (2009) observe a general perception that men possess more specific attributes such as dominance, and aggression, while women are seen as exhibiting greater nurturance and sympathy. The Life Course Perspective (Giele & Elder, 1998) cited would help understand and interpret women's life experiences in the Information Technology and Communication profession, within the broad socio-cultural and family context of South Africa. The perspective gave insight into the critical points (transitions) and the interplay of individual agency shaping and influencing these women's career trajectories. To this end, Milkie, Bierman, and Schieman (2008) conceded that life course perspective (Giele & Elder, 1998) directed attention to continuity and change in well-being over the life course and suggested how parenthood and the 'linked lives' of parents and children influenced trajectories of change in well-being over time.

Having explored the Life Course Perspective (Giele & Elder, 1998) as a theoretical foundation, the Border Theory (Clark, 2000) was explored in the next section.

3.5. The Border Theory (BT) (Clark, 2000)

The Border Theory (Clark, 2000) was relevant to the current study in that it looked at the different life activities, that is, work-life and the personal life. A study by Leung and Zhang (2017) draws on the work/family border theory to investigate the role of information communication technology (ICT) use at home in shaping the characteristics of work/family borders (i.e., flexibility and permeability) and consequently. Another study by Masuda and Visio (2012) could assist in understanding domain borders. The study explored employees’ permeability and flexibility preferences, perceived permeability and flexibility supplies of the workplace, work-to-family enrichment, and job satisfaction.

The experiences of female ICT professionals could be understood utilising this theory as it addressed the different roles that females play (in their work life and personal life) and how they experienced and balanced the two aspects. Figure 3.2. shows the Border Theory (Clark, 2000).

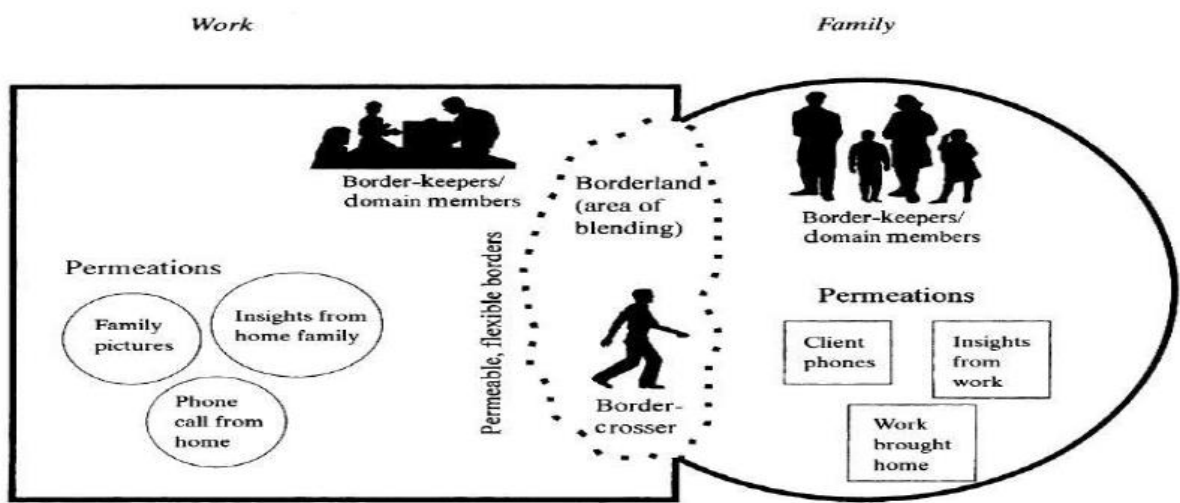


Figure 3. 2: The Border Theory (Clark, 2000)

(Adapted from: Border Theory: a pictorial representation and list of central concepts and their characteristics (Clark, 2000: 754)

According to the Border Theory (Clark, 2000), each person’s role took place within a specific domain of life, and these domains were separated by different borders possibly physical, temporal, or psychological. Clark (2000) indicated that the theory addressed ‘crossing borders’ between domains of life, especially the domains of home and work. Clark (2000) maintained that according to the theory, the flexibility and permeability of the boundaries between people’s work and family lives was bound to affect the level of integration, the ease of transition, and the level of conflict between these domains.

Clark (2000) & Hall and Quinn (2014) stated a distinction between physical, temporal, and psychological forms the borders could take. Furthermore, Bellavia and Frone (2005) stated that the theory addressed ‘crossing borders’ between life domains, especially the domains of home and work. Hence, the theory showed the need for a proper balance between work and non-work activities like a social life, family life, or health. Desrochers and Sargent (2004) contended that Border Theory (Clark, 2000) posited that work and family were detached, but mutually persuasive domains, and individuals negotiated between the work and family spheres to attain a work-life balance while facilitating transitions between these domains. Border permeability and Border flexibility of work-life balance were essential aspects of the Border Theory (Clark, 2000), discussed in the following section.

3.5.1. Border permeability and Border flexibility of work-life balance

Seeley (2015:34) stated that “permeability refers to the access of entering one’s physical, temporal, and psychological borders. A very permeable border may cause distractions (i.e., being disturbed while at work by a family member) but may also serve as reminders to individuals of their responsibilities in the other domain.” According to the Border Theory (Clark, 2000), the flexibility and permeability of the boundaries between people’s work and family lives affected the integration, ease of transitions, and conflict between these domains. Boundaries that are flexible and permeable could facilitate integration between work and home domains. With relatively integrated domains, a transition was more accessible, but work-family conflict was more likely between flexible and permeable domains. Conversely, Bellavia, and Frone (2005) asserted that a transition was more effortful when these domains were segmented, and work-family conflict was less likely. Clark (2000) outlined that borders vary in their degree of permeability. Border permeability occurred when elements from one domain crossed the border, which separated the two domains.

Rau and Hyland (2002) reported that flexibility in flexible work schedules or work processes could counteract possible work-family conflict emanating from organisational time demands. Rau and Hyland (2002) believed that these forms of flexibility were also referred to as spatial flexibility (where work is conducted) and temporal flexibility (when work is conducted). The flexibility of both spatial and temporal work boundaries enabled employees to balance their home and work demands, because demands from these two spheres were sources of inter-role conflict (Rau & Hyland, 2002). A study by Delecta (2011) also explores the different demands that employees face that consequently impact one’s life.

There are several options for temporal flexibility, but a key option is flexible working time. Employees who work flexible hours can adjust their working time according to their personal needs, thereby facilitating work-family balance (Rau & Hyland, 2002). Flexitime usually requires employees to be physically present at their work premises during ‘core’ hours. Flexitime grants temporal boundary permeability and flexibility. At the same time, it aims at managing the degree of permeability and flexibility of borders by requiring employees to be present at the work premises during ‘core’ hours.

An understanding of the central Tenets of the Border Theory (Clark, 2000) was vital for this study, and this is briefly discussed in the following section.

3.6. Central Tenets of the Border Theory (Clark, 2000)

Critical concepts in work-family Border Theory (Clark, 2000) include the characteristics of the home and work domains, central or peripheral participation of border crossers, and the border’s permeability and flexibility between the two domains (Clark, 2000). According to Clark (2000:748), work-family border theory attempted to provide an understanding of the “complex interaction between border-crossers and their work and family lives, to predict when the conflict will occur, and give a framework for attaining balance.” It postulated that although there were physical, temporal, and psychological borders between work and family, these two life domains interconnected (Clark, 2000). Women’s experiences within the Information Communications and Telecommunications career and their lives outside of work are scrutinised from the viewpoint of the Border Theory (Clark, 2000). Central participants have flexibility and autonomy when they have a central role player. This was correctly stated by Lambert et al. (2006). Other central participants in the domain interacted and were well connected with them. As illustrated in Clark (2000), the Border Theory draws attention to the interdependence between work-life balance and different life domains, making it relevant to the current study.

Having explored the central Tenets of the Border Theory (Clark, 2000), the Limitations and Strengths of the Border Theory (Clark, 2000) are looked at in the next section.

3.7. Limitations and Strengths of the Border Theory (Clark, 2000)

The Border Theory (Clark, 2000) is a useful way of conceptualising work-life balance, but it has been critiqued. The theory is mostly gender blind, as noted in the study of gender and work-life balance amongst women and men in midlife (Emsline & Hunt, 2009). Firstly, the work/family Border Theory (Clark, 2000) has been criticised for focusing solely on working

parents and children, and work and family domains only (Bourke, 2009; Gurney, 2010). Bourke (2009) cited that caring for aging parents was a reality many adults faced, and most research adopting the work/family Border Theory (Clark, 2000) did not consider this. Also, Bourke (2009) argued that a limited number of studies explored the frequent transition between multiple roles, which were not exclusive to work and parenting roles. Individual scholars (Emslie & Hunt, 2009; Gurney, 2010) explained that the work/family Border Theory (Clark, 2000) did not consider gender and socio-economic structural differences related to Work-Family Life Balance in domains, temporal borders, and border strength. Emsline and Hunt (2009) found that the theory was mostly gender blind, as noted in the study of gender and work-life balance amongst women and men in midlife. Emsline and Hunt (2009) noted that the border between work and family might be of more importance to men than women because women were likely to be more frequent border crossers than men when it came to caring for children and elderly relatives.

Another aspect neglected by the work/family Border Theory (Clark, 2000), according to Gurney (2010), was that domains were not fixed, but rather changed during the life course of individuals. Also, Gurney (2010) contended that every individual attached different level of importance to domains depending on their circumstances, and because of unique experiences, the work/family border diagrams would differ from person to person. Jacobs and Gerson (2004) noted that the border between work and family could be of more importance to men than women because women were more likely to be frequent border crossers than men when caring for children and elderly relatives.

A study by Mungania (2017:19) added on by stating that, “work and family Border Theory (Clark, 2000) focused on the domains of work and family to the exclusion of any other areas of life such as wellness, leave benefits for personal reasons and or friends or leisure.” Clark (2000) justified this by stating that work and family were the two most important aspects of people’s lives. Another limitation of the Border Theory (Clark, 2000) is that, while this theory allowed for individuals to attach different values to the domain of work and family, it appeared to be primarily focused on the needs of parents, caregivers; failing to take into account the importance attached to other domains such as leisure, sport for wellness and socialising. The current study sought to find how females in the Information Communication and Technology profession handle work-life balance.

In terms of strengths, this theory offers a practical framework for understanding work and family domains in individuals’ lives and how they can achieve balance (Clark, 2000). The work/family Border Theory (Clark, 2000) is also essential as it offers individuals and

organisations tools for achieving work-family balance (Clark, 2000). The latter developed specifically for working parents involved in work and family domains and used to understand how conflict occurs and identify ways in which individuals could achieve work-family balance (Clark, 2000). This theory also offers a practical framework for understanding work and family domains in individuals' lives and ways in which they can achieve balance (Clark, 2000).

For the current study, the Border Theory (Clark, 2000) has been discussed, so linking up the study with the concept of work-life balance is also essential. The next section discusses the Border Theory (Clark, 2000) and work-family balance.

3.8. The Border Theory (Clark, 2000) and work-family balance

Clark (2002) stated that, the Border Theory (Clark, 2000) was essential as it offers individuals that balancing one's work and family roles was assumed to be an important goal for border crossers. There are varied and inconsistent definitions of work-family balance. The equilibrium between one's work and family that is considered balanced is relative in that different people view it differently (Clark, 2002). What one person could regard as the optimum balance between work and family, might not necessarily be regarded as balanced by the next person. Thus "balance is attained when a person feels comfortable with the way they have allocated their time and energy and integrated and separated their responsibilities at work and home" (Clark, 2002: 24). Therefore, this definition points to the subjective nature of work-family balance experiences in that different people have different needs, which in turn affect their perceptions of balance. Desrochers and Sargent (2004) added that the work and family spheres were microsystems that interrelated and influenced each other. The borders between them varied in their nature on a continuum from being permeable to impermeable.

In Clark's (2000) 's theory, although the aspect of domain comparability is vague, the argument is that the ideal degree of border strength, which allows work-family balance, is dependent on the comparison between domains. Thus, less defined borders facilitate balance where domains are similar, whereas more defined borders do so when domains are not comparable. The work-family Border Theory (Clark, 2000) does not value which border is good or bad. Instead, the effectiveness of the border depends on domain comparability. In the following section, to have a relevant and recent approach to the study, the Border Theory (Clark, 2000) in the 21st Century is discussed next.

3.9. The Border Theory (Clark, 2000) in the 21st Century

In the 21st Century, the prevalence of mobile electronic communication devices such as smartphones, tablets, and laptops enables work contact outside regular work hours for an increasing number of workers with smart working agreements, as well as for office workers in traditional sectors (Ghislieri, Emanuel, Molino, Cortese & Colombo, 2017). The Border Theory (Clark, 2000) is especially relevant for the current study as the world is currently experiencing a heightened pace in technology, which has become part of every individual's life.

Schieman and Young (2013:244) used the term work contact as “shorthand for the frequency with which workers send and receive work-related communications (e.g., emails, phone calls, text messages) outside of regular working hours.” The authors noted that expanded access to email and smartphones enabled remote work and contributed to ‘24/7 availability’. This presented worker with new challenges to manage and maintain the boundaries between work and home life (Derks, van Duin, Tims & Bakker, 2015; Ghislieri et al. 2017). The use of communication technologies outside work hours was found to impair the quality of interactions with friends (Rotondi Stanca & Tomasuolo, 2017) and thus also expected to impair satisfaction with the work-life balance on the part of both partners.

Schieman and Young (2013) and Voydanoff (2007) opined that electronic communication devices such as smartphones, laptops, and tablets could increase the permeability of the boundaries between the work and home domains. The devices could serve as boundary-spanning demands, where elements from the work domain entered the home domain, such as when individuals received work-related telephone calls at home. Schieman & Young (2013) and Voydanoff (2007) also mentioned that work contact in leisure time was a boundary-spanning demand associated with role blurring; distinguishing between the work role and family roles became unclear. Recent studies by Derks, Brummelhuis, Zecic, and Bakker (2014) have shown, for example, that smartphone use in the evenings hinders engagement in recovery activities, and this is related to emotional exhaustion according to (Xie, Ma, Zhou & Tang, 2018). This can impair well-being, according to Gombert, Rivkin, and Kleinsorge (2018). Therefore, work contact in leisure time may impair individuals' satisfaction with work-life balance.

To contribute to the literature in the current study, the rationale of the life course perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) for this study are discussed next.

3.10. The rationale of the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) for this study

Clark (2000) was of the notion that combining the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) could provide a broader picture of the employees' situation, and the choices available in their bid to achieve the preferred work-life balance. Clark (2000) explained the emphasis that one type of work-life balance may not be ideal for every employee, as they all have different preferences. In the current study, the contribution is the adaptation and extension of the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) to women in the contemporary Information Communication and Technology sector in South Africa.

Giele and Elder (1998)'s life course perspective is vital for this study as it could help future researchers understand female ICT professionals as they pass through different life stages in life. For example, for those female ICT professionals who choose to get married and have children, the challenges are bound to be different from those of female ICT professionals who choose to put their careers before anything else, in this case opt to not get married or have children. The Border Theory (Clark, 2000) is essential for this study because the female ICT professionals are renowned for being daily border crossers between work and life, and with the ICT field being busy arena, this poses several challenges. Combining working and living into a set of functioning activities, for example, is destined to be a challenge for female ICT professionals, and therefore an understanding of such an issue is fundamental.

The attention on the interaction between the two domains of an individual's existence could be mainly attributed to the changes that occur within family structures, the changing nature of jobs due to economic, business, and social developments, as well as the changing face of organisations (Koekemoer & Mostert, 2010; Jacobs, Renard & Snelgar, 2014). To this end, the increased focus on the concept of work-life balance in this century could also be attributed to the change in career outcomes, and gender roles within the two domains, the increase in dual-earner couples, multiple social roles, as well as a shift in organisational strategies (Koekemoer & Mostert, 2010).

The Border Theory (Clark 2000) suggested that the relationship between two different domains was not only emotional, but a human phenomenon. It also emphasises physical things such as people and places, and not only people's emotions, may be a source of conflict. Clark (2000) states that to find balance, people manage, negotiate, and shape the borders of work and home, and might even change the nature of these domains to some extent. Herman (2015) made use

of the terms ‘frayed career’ to imply the rhythmic view of careers across the life course, which encompassed a range of non-typical career patterns, including multiple career changes and career identities, as well as ‘careerscape’ to characterise women’s movement in and out of work over the life course. An earlier study by Sears and Galambos (1992) explored marital adjustment established that one domain can affect another. It was worth noting that the results of the study are consistent with the notion that positive work conditions (e.g., no work overload) may spill over into more positive marital relation.

Career changes such as a promotion at work or more responsibility in terms of work duties are sources of life course change events, which can be analysed in a bid to understand the complicated relationship that the female ICT professional may have with her life regarding balancing work and life. Doubell and Struwig (2014) stated that human capital and social capital were critical factors for women’s career development; however, many women reported limited developmental opportunities, with few role models and mentors available for development purposes, ultimately affecting their career advancement.

Lewis, Anderson, Lyonette, Payne and Wood (2017) emphasised the importance of understanding the distinctiveness and uniqueness of the ‘female career’ as the pattern of women’s career change, relative to how they reconcile their roles, relationships, and domain participation at any particular point in time. The female ICT professional’s career can thus be looked at as a series of life cycle changes over a lifetime, and that’s what makes the Life Course Perspective (Giele & Elder, 1998) very applicable to the current study.

The Life Course Perspective (Giele & Elder, 1998) allowed the researcher a more in-depth contextual analysis of female ICT professionals’ life histories over time to identify transitions and trajectories, and to determine how socio-cultural and family contexts influence individual choices. This approach treats the life course of an individual as dynamic, through which she interacts with opportunities. However, thus far, this approach has only been studied in a Western context (see Jayawarna, Rouse & Kitching, 2013). The Border Theory (Clark, 2000) also allowed the researcher to gain an understanding of how the work and non-work domains overlap in trying to gain knowledge of the female ICT professionals’ life.

3.11. Conclusion

Having explored the two theoretical frameworks underpinning the current study, the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000), it is imperative to understand the construct of work-life balance. The next Chapter (four) explores the literature

on work-life balance to understand this phenomenon and a document analysis of Telkom's work-life balance policy and programme.

Chapter 4

Work-life balance: A literature review

4.1. Introduction

Chapter 4 looks at the third part of the literature review which is the work-life balance. This chapter also presents the document analysis of the Telkom policy and programme. This chapter will give a review on work-life balance, current theory on work-life balance and types of work-life balance. Discussions on factors that contribute to successful work-life balance, the importance of maintaining work-life balance and good and poor work and home-life balance will be provided. Global studies of work-life balance of women in Information and Communication Technology, international and South African legislation on work-life balance will be scrutinised which will culminate into Telkom policies on work-life balance being analysed at the end of this chapter.

Technological advancement brought changes to the workforce, which had both positive and negative impacts on people's lives. Kotecha, Ukpere and Geldenhuys (2014) reported that the innovative Information Communication Technologies (ICTs) had allowed new work patterns, including working after hours, enhancing WLB, and creating work-life conflict in work and non-work domains which are closely integrated. Walila (2012) maintained that instead of bringing relief and leisure, technology had left employees, particularly professionals, with less free time for other duties outside work. Moreover, technology distorted the line separating work from personal life, thereby enabling employees to be accessible for office work while at home (Walila, 2012). In retrospect, technology has had a bearing in the invasion of work activities on the family life space.

John and Gratton (2013) outline that, in three significant waves of change over the past 30 years, employers and workers have converged on new arrangements for getting knowledge work done. First, home computers and e-mail spawned an army of freelancers, offering both workers and employers new flexibility. Next, mobile technology and global teamwork gave the same kind of work-anywhere, work-anytime flexibility to full-time employees, without asking them to forsake career progress and development within their companies. Now, in a third wave, new ways of providing community and shared space are curing a side effect of virtualisation- worker isolation-and driving increased collaboration. Earlier studies by Ramilo (2002) & Hafkin and Taggart (2001) highlight the long hours of the ICT made it not impractical for women to pursue a career in ICT. Still, work can be conducted anywhere and anytime

allows women to consider a career in ICT. Recently, de Maar (2019) opines that with technology evolving at the pace that it has this ever-changing environment requires a higher demand in hours worked as technological methods makes it easier to work remotely from any location at any time.

A South African census on female employment conducted in 2011 and 2016 showed an increase from 44% to 45% (Statistics South Africa, 2016). The reasons for this increase could be ascribed to aspects such as the better implementation of the Employment Equity Act and global economic changes (Van den Berg & Van Zyl, 1998; Mostert, 2009; Fernandez, 2013).

Despite all the progress made incorporating women in the workplace through legislation and other mechanisms, a 1% increase in 2011 to 2016 was not significant enough and showed that women were still not accessing the workplace at a more progressive rate. Much more needs to be done to create more opportunities for women to access the workplace, such as girl child education from primary level, all the way to higher education levels. Jang and Zippay (2011) opined that traditionally, women identified themselves with the roles related to interpersonal relationships and caring, in contrast to men, who focused on their careers and work.

In the current chapter, the work-life and Telkom work-life balance document analysis of the study are presented as follows:

1. Work-life balance
2. Current theory on work-life balance
3. Types of work-Life Balance
4. Factors that contribute to successful work-life balance
5. The importance of maintaining work-life balance
6. Good and poor work and home-life balance
7. Global studies of work-life balance of women in Information and Communication Technology
8. International legislation on work-life balance
9. South African legislation on work-life balance
10. Telkom policies on work-life balance.

4.2. A review of work-life balance

The term work-life balance (WLB) has gained increasing popularity in the public discourse (Kelliher, Richardson & Boiarintseva, 2019). Over the past few years, the discourse around

work-life balance (WLB) has gained widespread attention from researchers and management practitioners (Nicklin, Seguin & Flaherty, 2019; Kaya & Karatepe, 2020).

Work-life balance is not merely the time divided between work-life and non-work-life. It needs to be achieved by minimising the conflict among these two domains, by balancing the multiple roles and tasks involved (Kumarasamy, Pangil & Isa, 2015). Work-life balance is a canopy term involving different social concepts, including work, life, family, home, balance, harmony, equilibrium, conflict, enrichment, and integration (Braun & Peus, 2018). The South African context can best be understood by looking at employees' work-life balance experiences as more people from previously disadvantaged and historically excluded sectors become part of the new workforce, potentially transforming traditional, culture-specific family roles. Jones, Burke, and Westman (2013) stated that the study of work-life balance and integration had become increasingly relevant for several reasons: demographic and social changes, women (and especially working mothers) entering the workforce, technological advancement, and globalisation.

Opie and Henn (2013), Wattis, Standing and Yerkes (2013), Sullivan (2015), and Toffoletti and Starr (2016) asserted that work was viewed as a means to structure individuals' lives, provide contact with social reality, and achieve status, self-esteem, and self-actualisation. Despite the growth in women's employment, societal gender norms still command the workplace as a men's primary domain, while women were still seen as the primary caretaker of the home and children. The South African Department of Women Report (2015) stated that females spent considerably more time on unpaid/household work than their male counterparts, with the gap unusually enlarging in the years around age thirty, which were considered prime years for childbearing and childrearing, exacting particular demands on women's time. The South African Department of Women Report (2015) revealed that females in South Africa cumulatively spent an estimate of 15 500 hours more than males in productive work (unpaid and paid work combined) across their lifespan 10 and 70 years. Additionally, while most studies have found no significant relationship between age groups and the work-life balance (Pieterse & Mostert, 2005), it is suggested that the relationship between work and non-work may be even more important to younger employees than it is to other groups of workers (Sturges & Guest, 2004).

Herman and Lewis (2012), Herman (2015), and Cervia and Biancheri (2017) asserted that a challenge like combining time spent in unpaid work with time spent in the workplace was particularly prevalent among women in male-dominated occupations such as Science,

Engineering, and Technology (SET). The challenges they continued to face included several unique and challenging obstacles all stemming from these organisations' gender norms and assumptions.

The next section presents a brief overview of current theories to work-life balance.

4.3. Current theories to work-life balance

One current theory states that most research examining why organisations adopt WLB practices is based on the Neo-Institutional Theoretical approach, which contrasts the economic rationality that underlies much of the behaviour of organisations with an institutional rationality (Den Dulk, Groeneveld, Ollier-Malaterre and Valcour, 2013). A recent US study by Sweet, Besen, Pitt-Catsouphes and McNamara (2014) reported a decline in availability of WLB practices from 2006 to 2009, which the authors attributed to adaptation to the uncertainties associated with economic recession. However, these studies focused mainly on availability of WLB practices, as reported in surveys.

Another approach is the Critical approach, and it is of the view that the WLB terminology has been critiqued for several reasons, not least because it has connotations of individual imperatives to 'get the balance right' (Bloom, 2015). Lewis, et al. (2017) contend that despite their different perspectives, both Neo-institutional theory and Critical approaches suggest that changing economic contexts may alter the focus on economic benefits of WLB practices for employers, although the Critical approaches address the shifts in WLB discourses and meanings.

Michel, Kotrba, Mitchelson, Clark and Baltes (2011) described another current theory, The Resource Drain Theory that described the stress associated with the demands of performing multiple roles at home and at work. There was significant evidence that a close relationship existed between stress at work and stress at home. It can be deduced that minimising stress at work will ultimately lead to a happier, more productive workforce.

The next theory is the Boundary Theory that is based on the hypothesis that employees need to work towards separating their work and home lives, thus find a way to erect an imaginary boundary between the two to prevent overlap. Management of this boundary was important in achieving work-life balance. Hahn and Dormann (2013) advocated boundaries as separating and adding structure to the various roles that individuals have at any given time. The management of this boundary could be highly beneficial to employees. However, it was unlikely it would be easily achievable for most, as work activities often inevitably impinged

on personal lives (Sturges, 2008). Conflict Theory was extreme and proposed that work and home lives were incompatible, such that each could easily hinder the role performed by the other (Michel et al., 2011).

In today's world, to be competitive organisations have begun to acknowledge the importance of WLB practices as a tool that can be used to gain competitive advantage to retain talent. Work intrusions into the personal life of mainly professionals have significantly influenced their work related behaviour (Chou, Hecker & Martin, 2012). Qu and Zao (2012) found that work interference with family life reduced both job and life satisfaction. Styhrea (2011) reported that those who worked long hours, while having poor WLB, job insecurity, and low professional worth ran the risk of negatively impacting their well-being, resulting in low job satisfaction. From a more recent study, it was found that employees' trust in their organisation's ability to care for their well-being impacted the organisation positively overall (Fischer, Zvonkovic, Juergens, Engler & Frederick, 2015).

The chosen approaches of the Life Course Perspective (Giele & Elder, 1998) enabled the researcher to gain a more exhaustive appropriate examination of female ICT professionals' life accounts and interpretations over time to detect life changes, paths, and family contexts, as well as how socio-cultural aspects, affect individual choices.

The existence of women in the Information and Communications Technology (ICT) sector, which falls under the Science, Engineering, and Technology (SET) in what was a traditionally male-dominated arena, is of interest. Thus, an understanding of their work-life balance, challenges, and experiences comes into consideration. The next section explores the types of work-life balance.

4.4. Types of work-life balance

Downes and Koekemoer (2011) indicated that although work-life practices varied considerably, they mostly fell into five categories. These categories included flexible work schedules, flexi place or telecommuting, job sharing, part-time flexi place, and sabbatical or career breaks. These are described in the following section.

4.4.1. Flexible work schedules

Altering the starting and finishing times of work. According to Downes and Koekemoer (2011), flexitime helped employees cope with work and family responsibilities. Concerning the flexible working hours' variable, there was a comparative study conducted by Marafi (2016).

The study was driven from International Business Machines (IBM) work and life issues survey between the USA, and the UK indicated that flexible working hours and working conditions improved the work-family balance and also showed that 94% of employers and 95% of employees agreed that people work best to achieve the right balance between work and personal life respectively.

- Flexi place or telecommuting: This includes working in a convenient place or the nearest office to the employee (other than remote company offices), or at home. A study by Jacobs (2017) revealed that having flexible work arrangements, or access to them had no impact on childfree employees' organisational commitment.
- Job sharing: This involves task sharing between two employees or more. According to Tipping, Chanfreau, Perry, and Tait (2012), this provides the sharers with much job flexibility and time to address other responsibilities as well as improves the quality of work because when two people are sharing a job of one person, there is a high possibility of achieving high performance compared to when one person has done the job. Part-time flexi place: this includes working part-time and using a different location than where one is officially stationed as a convenient place to work closer to home.
- Temporal work arrangements: These permit individuals to cut the number of hours they work, flexible work provisions like flexitime that allows workers to pick their preferred starting or finishing times and working from home.

The advent of the 4th Industrial Revolution required that organisations in South Africa provide flexible work arrangements in response to this, a concept often resulting in a more significant organisational commitment by employees. Employees around the world, across a diverse span of industries, are facing the same challenge: how to create a balance between work and life. Organisations in South Africa are beginning to provide flexible work arrangements in response to this. This has often resulted in a more significant organisational commitment by employees. Sullivan (2019) asserted that research showed that there were significant disparities between men and women about the work-family balance. Sullivan (2019)'s statement is supported by the fact that now employees worldwide, across diverse industries, are facing the same challenge: how to create a balance between work and personal life.

Having looked at the types of work-life balance, an understanding of their work-life balance, challenges, and experiences comes into consideration. the next section looks at factors that contribute to work-life balance.

4.5. Factors that contribute to successful work-life balance

In today's fast-paced world with a significant number of women entering the workplace, several factors now influence the way work-life balance is attained. An early study by Fried (1998) opined that, even though most women work for pay, they remain the primary caregivers for their young children and, increasingly, for their elderly parents. Gallhofer, Paisy, Roberts, and Tarbert (2011) noted that work-life balance is a challenging aspect and coupled with people's different life roles makes the phenomenon more complex. More recently, Pulevska-Ivanovska, Postolov, Janeska-Iliev, and Magdinceva-Sopova (2017) found that work-life balance is very difficult to achieve and should be approached by making the right and necessary decisions that may facilitate one's efforts to attain it.

The following section details the factors that contribute to work-life balance. Firstly, the dual-career woman and role-conflict, is discussed in the following section.

4.5.1. The dual career woman and role-conflict

Pretorius, Mawela, Strydom, de Villiers and Johnson (2015), in an online survey, found that 87% of the South African women respondents indicated that they found the IT industry challenging rather than chaotic. The respondents (58%) indicated that the biggest challenge lay in finding time for the continuous demand for an education upgrade to keep up with the ever-changing IT industry. Almost all the women (97%) agreed that the IT industry was demanding and required ongoing upgrade of education and time.

In a profession like ICT, where the environment is forever changing and requires employees to work long hours, balancing work and family is increasingly becoming an issue because the family may be negatively impacted, which causes role conflicts for female ICT professionals. Secondly, the factor, organisational culture in relation to work-life balance is discussed in the next section.

4.5.2. Organisational culture

The organisational culture in any organisation can influence work-life balance. According to research, work-life balance was created through a robust organisational support system, developed through organisational culture (Rife & Hall, 2015). Groner (2018:4) added that "the organisation's culture is essential for everyone involved and for the organisation's success. The culture determines the leadership styles and upper management roles, which affects individuals' work-life balance." The leaders in an organisation bear the responsibility of setting

examples of the organisation's way of doing things. In an environment, such as the Information Technology and Communications, which now influences every aspect of the modern world, issues like time are critical to the culture determined by an organisation which defines the way things are done. In a study by Mathur-Helm (2006), it was found that, in SA, while women were gaining acceptance to enter the boardrooms informally, the culture of long working hours and demanding job requirements was discouraging them from actually holding seats there. A similar sentiment is shared by Sandberg (2013) and Ward and Eddy (2013) & Emory (2008). They assert that male-dominated culture, stereotypes, and discriminatory factors in organisations led to women withholding their capabilities and basing their actions on their dual responsibilities.

Thirdly, the next factor which is the role and time prioritisation of ICT employees is discussed.

4.5.3. Role and time prioritisation of ICT employees

An early study by Bandias and Warne (2009) explained that work-life conflict is an issue women struggle with, especially when it comes to careers that require a lot of investment of time. In addition, Cassar and Meier (2018) highlight numerous research studies that have examined employees' relationship to their workplace. The studies have found that work serves as more than a source of income for many employees; it is a source from which some people seek personal gains, such as a sense of meaning or fulfillment.

Many organisations strive to enhance their employees' work-life balance (e.g., through flexible working practices, family-friendly policies; Fleetwood 2007; Morganson, Litano & O'Neill, 2014; Munn, 2013; Wang & Verma, 2012) to promote satisfaction and productivity. In line with the practical demand, psychological research at the work-life interface has flourished (Haar, Russo, Sun'e & Ollier-Malaterre, 2014; Michel, Kotrba, Mitchelson, Clark & Baltes, 2011; Shaffer, Joplin & Hsu, 2011).

A study by Ajith and Vidya (2013) on work-life balance for role prioritisation of IT employees showed that the employees were able to fulfill their professional and personal commitments at the same time because of better work-life balance policies. The relationship between work-life balance policies and role prioritisation was significant. The study was conducted on variables like traveling time, depression, temper, the work itself, to know the relationship between work-life balance and stress management. Additionally, a study by Nam (2014) explored the interaction of technology and work-life balance, such as working overtime and reducing time for rest, hence showing the over-lapping of one domain into another.

In the ICT environment, as with any other environments, time is of vital importance because of organisational time expectations, and workers being expected to have a good sense of time management, to achieve organisational goals. A failure by an employee to manage time thus lose the ability to achieve organisational goals can result in loss of business and put an organisation into disrepute.

4.5.4. Organisational and co-worker social support in achieving work-life balance

Nowadays, the line between work-life and home-life has become indistinguishable, as the two aspects have a significant impact on each other, and therefore social support from both facets of life becomes necessary, that is, support from the employer organisation, as well as support from the family structure. Ojha (2011) asserted that research studies about social support from supervisors were associated with lower incidences of work-life conflict. Therefore, Ojha (2011) continued by stating that a lack of supervisor and co-worker support was associated with higher levels of work-life conflict, and Ten Brummelhuis, Oosterwaal and Bakker (2012) reported that social support prevented the depleting effect family demands had on task performance at work, and helped employees reconcile their work and family roles. A study by Russo, Buonocore, Carmeli, and Guo (2018) demonstrate that employees with a low need for caring are less sensitive to supervisors' family supportive behaviours, nullifying their efforts and wasting essential resources.

Working professionals' most significant problem was the inability to balance the demands and pressure at work and demands and pressures on the home front (Mohanty & Jena, 2016). Hence in a fast-paced work environment of Information Communications and Technology, social support from one's family structure could reduce work-life conflict, thus help avert other issues such as stress that could negatively impact job performance and work-life balance.

A study by Neelam (2014) in Mumbai of 100 employees from two industries compared women employees' work-life balance from education colleges and Information and Technology industries. It was observed that the duration of the working hours was not always uniform in the case of women Information and Technology professionals in Mumbai city, and the working hours varied based on the nature of the project assigned to them. Neelam (2014) also found that young married female women employees in their late twenties or early thirties and having children were more stressed as they attempted to integrate their work and non-work lives. Baby care and managing household chores were observed to have the most pressing demand for them and the family. Having their spouses working in 9 to 6 job schedules, meant they had to depend mostly on housemaids, with some of them having to enroll their children in crèches. It was

found that women in education were far more satisfied than those in the Information and Technology sector, because the primary cause of life imbalance in the Information and Technology sector was work pressure, while in education it was family responsibilities. The study by Neelam (2014) concluded that in the case of women professionals in the Information and Technology sector, it was essential to understand the reality on the ground and then try and strike a balance between professional and personal life, for the purpose of achieving professional excellence.

As outlined in the previous section with regards to organisational and social support in achieving work-life balance, coworker support is essential, and George (2015) was of the view that support from both work colleagues and supervisors was essential for the motivation of employees when performing their duties, while relationships between coworkers were frequently featured among workplace stressors. The factor, organisational commitment, is discussed in the next section.

4.5.5. Organisational commitment

Gillard and Mitev (2006) opined that a tension emerged between policy and practice in the ICT industry, where women found it hard to gain work and once, they do, they struggle to have commitment. The ICT is renowned for its long hours' culture, is slow to implement government recommendations for more significant work flexibility, and their soft skills remain unrecognised. In recent years, Zheng, Molineux, Mirshekary, and Scarparo (2015) highlighted that there were many ways an organisation could meet employee needs to achieve balance in their work-life. Available literature offers five distinct groups that represent organisational WLB programmes and policies, namely: flexible work arrangements; provision of health and wellbeing programmes; provision of childcare services or; provision of leave as needed to address family matters; and organisational support and understanding individual needs. Pruyne, Powell & Parsons (2012) also report that 'wellbeing in the workplace' is now a point of focus in many occupational settings.

According to Walter (2013:10), it was essential to keep in mind that separating work and home-life was essential because "...money does not make you rich, it just allows you to buy more stuff."

Having explored the factors that contribute to work-life balance, the next section looks at employees' qualities with good and bad work and home-life balance, in terms of their abilities to balance their work and home lives.

4.6. Good and poor work and home-life balance

Studies have shown that employees with better work and home-life balance tend to be less angry while at work (Brimmer, 2013). Employees who are less angry at work tend to positively affect guests and other employees, resulting in higher levels of productivity (Brimmer, 2013). According to Baral and Bhargave (2010), work and home-life balance occurs when skills, perspectives, flexibility, physical, social capital, and material resources in one aspect of life improve, thus positively affecting other aspects of life. Work and home-life balance are greatly affected by other employees' support, support at home, company norms, and personal characteristics (Deery & Jago, 2009). In Information Communications and Technology, females need to keep abreast of developments and manage a home simultaneously, and this is a good quality one can possess.

The ICT field can be stressful thus overwhelm employees, resulting in all sorts of work-related problems for them, which could spill over into the home domain. For instance, Brimmer (2013) asserted that employees who experienced many anger issues at home usually brought that anger to work, and Yavas, Karatepe and Babakus (2011) stated that feelings of discouragement and frustration in one area easily transferred into other areas.

An inability to balance work and home-life could result in problematic issues for workers in their personal lives, marriages, relationships with friends and family, with consequences such as workers abusing alcohol and illicit substances. This can easily give rise to stress, mental and physical pain, and depression, thus causing a decrease in productivity. The following section explores aspects pertinent to work-life balance in women.

Nathani and Jha (2009) indicated that factors influencing work and family life spheres fell into three groups. Namely, family and personal life-related factors, work-related factors, and others. Nathani and Jha (2009) put forward the idea that family and personal life-related factors included increasing participation in the workforce of; women in general, childbearing women, dual career couples, women from single-parent or single-person households, an increase in child-care/elderly-care burden on employees, and health and wellbeing considerations. Nathani and Jha (2009) acknowledged that work-related factors also included a culture of working long hours, unpaid overtime, time squeeze, demand for shorter working hours, increase in part-time workers, work intensification and stress, and changing work times. A survey by Neal and Hammer (2017) found that employees were caught between caring for both children and aging parents (i.e., sandwiched generation X). A recent study by Ireson, Sethi, and Williams (2018)

confirmed an increase in the number of employees involved in the care of children and also caring for their elderly parents or spouses.

An early study by Favero and Heath (2012) established that women had several different life roles, commitments, and interests that occupied their time and energy outside of working hours. Activities not related to caregiving or work, such as volunteering, education, and travel, could fulfill women's lives outside of the office. In addition, Bombuwela and Chamaru (2013) in their study found that housework is the highly affected factor to being women as economically inactive. A recent study by Yapp (2018) verified that women still needed to do the lion's share of housework despite going out to work in the ever-increasing digital world.

The following section looks at some aspects pertinent to work-life balance in women with care for aging parents and other dependents being the first one.

4.6.1. Care for aging parents and other dependents

In the 21st Century, according to Naldini, Pavolini, and Solera (2016), the issue of how informal elderly care affects women's employment was found to be crucial in the context that more and more people tended to rely on informal care (family care). Kumari (2019) posited that organisations needed to implement policies, which made it possible to combine work with other aspects of life, such as caring for children and elderly relatives. Given that modern life inevitably makes many demands on people's time, working time arrangements must consider employment rates to increase.

For female ICT professionals, balancing work and non-work responsibilities requires support from both domains. Naldini et al. (2016) stated that, as is the case for mothers' employment, the context in which women and their families live played an important role in shaping their family-care strategies, and consequent labour-market participation, especially when a parent was frail. Shiva (2013) explained that working women having small children were forced to leave their children in daycare, or in the care of a maid. This created more tension for the women, and fewer of them managed to concentrate on their work, since they could not give proper care to their families. In their study, Leena and Sudhir (2013) revealed that spending too much time on household chores destabilised the already thin line of balance between work and life, as females were generally burdened with childcare, elderly care, and other household responsibilities and in a recent study by Awung and Dorasamy (2015), it was established that, traditionally, males are supposed to be responsible for external affairs. Females are supposed to be responsible for internal affairs, and males are assumed to be superior to females.

Krymis (2012) proved this in her study, stating that women confessed that being a mother affected several aspects of work life. It is therefore apparent that domestic responsibilities affect women's careers to a large extent, and the rate of career progression for female employees is slower compared to male employees. Family life, whether it's nuclear or joint and career breaks, affect the work-life balance of women employees.

The next section looks at the aspect closely related to the care of aging parents and other dependents, women's roles as caregivers.

4.6.2. Women's roles as caregivers

Bencheva, Kostadinov, and Tsvetkova (2018) mention that the challenges that stem from care responsibilities are the most cited issue of why women only work on a part-time basis in male-dominated sectors like ICT. However, Muller-Heyndyk (2019) asserts that the availability of flexible work arrangements in organisations is aimed at attempting to mitigate work-life challenges.

A common denominator for feelings of being overwhelmed and out of balance could be attributed to what some scholars call 'the second shift' (Iverson, 2011; Paludi & Denmark, 2011; Williams, 2000; Vlasnik, 2011). The 'second shift' refers to women completing a full day at work, and then going home to only continue working (the second shift) taking care of their home and their children. Considering the second shift, women work longer hours than men are, and this work overload creates the potential to seriously affect a women's physical and emotional wellbeing (Paludi & Denmark, 2011). Some women have found the utilisation of flexible work arrangements, consequently not having to reduce work hours, but combine career and care responsibilities, allow themselves (especially mothers) to cherish their ambitions while at the same time caring for their children (Dikkers, Engen & Vinkenburgh, 2010).

According to Armstrong Reimenschneider, Reid, and Allen (2007) & Valk and Srinivasan (2011), long working hours for women provide pressure due to uncertainty and instability in the ICT field. This can be due to the time differences with the western countries since there is a necessity to work at odd hours (shift hours), including night hours and project-based unpredictable workloads and project delivery with extensive traveling. The ICT Women Professionals have to adapt themselves to the rapid technology by re-skilling and training. Reddi and Vemraju (2006) also point out the unequal time spent on home activities and work activities.

Levy (2012) conducted a study on work-life balance of working women, which explored ways in which full time and part time work affected women and their perceived work-life balance, and examined the influence of childcare support, educational attainment, age of youngest child, number of hours worked, and high workload on their perceived work-life balance. Work domain variables affect the perceived work-life balance of working mothers. Levy (2012) found that working women employed full time, with younger children, experienced a significant negative impact on their ability to balance their work-life successfully. According to Reddy, Vranda, Ahmed, Nirmala, and Siddaramu (2010), childcare, including the number of children and age of children, plays a crucial role.

The next section looks at single and childless workers.

4.6.3. Single and childless workers

Research about work and life balance has largely excluded unmarried single workers, without children (Casper, Weltman & Kwesiga, 2007; Morrissey & Schmidt, 2008; Schultz, Hoffman, Fredman & Bainbridge, 2012). Young, single professionals without children, are also often left out of the discussions regarding work and life policies and programs. Schultz et al. (2012) stated that individual employees would likely seek different methods for obtaining work and life balance, and specifically that young professional's desired greater separation between work and life. Favero and Heath (2012:337) found that young professionals, also known as Generation Y, were "more interested in making their jobs accommodate their personal lives". McGregor (2013) cited that young professionals felt that "instead of having to explain why they need the flexibility, employees should share how they're going to get the work done," and then be trusted to complete their tasks while still participating in their non-work activities (McGregor, 2013:7).

Women without children either through choice or circumstance should not be ignored in their quest for work and life balance. Trends show that employees who are married and raising children are no longer the most dominant participants in the workforce (Young, 1999). Bryson (2007) noted that some well-educated women were attempting to control their work and life balance by delaying motherhood or choosing not to have children at all.

The aspect of working mothers is looked at next.

4.6.4. Working mothers

Valenduc, Vendramin, Guffens, Ponzellini, Lebano, d'Ouille, Collet, Wagner, Birbaumer, Tolar, and Webster (2004) mention that two key words characterise work in the ICT sector: speed and long hours, associated with the unpredictability of working time that makes very difficult any attempt of organisation of the private life. The actual work duration, often near 50 hours per week, is a real factor of discrimination concerning women.

Haslam, Patrick and Kirby (2015) reported findings on the challenges working mothers endured, and what they considered as their main support systems. A study by Crowley and Kolenikov (2014) also showed in their study that the control mothers had on their time-off was significant and relevant to their perceptions of work and parenting demands. This finding supported by Crowley and Weiner (as cited in Crowley and Kolenikov, 2014), in which mothers' control of their time-off, and flexibility was considered extremely important. When participants were asked to design an ideal job, they reported that time-off options were more important than having flexibility of work arrangements.

As reported by Armstead (2015) the balance of work and life among women has focused on the needs and the experiences of working mothers. A report by Reddy, Vranda, Ahmed, Nirmala and Siddaramu (2010) also highlights that women with younger children faced more challenges than those with older ones.

While without a doubt more women have entered the workforce in largely male-dominated industries in the past years, research has shown that women remain primarily accountable for most of the domestic labour in families, and childcare (Tang & Cousins, 2005). Working mothers often have more jobs and responsibilities in household chores than fathers have, duties such as children care, elderly care, house chores, and family needs that require mothers to sacrifice extra time to accommodate all the required tasks. Hoobler, Lemmon, and Wayne (2011) explained that women were generally viewed as having greater family-work conflict (defined as family responsibilities interfering with their work) that is incompatible with a work environment that demands long hours and 'face time.' In addition, a study by Rizavi and Sofer (2010) explored the effects of women's substantial investments in career and their relative positions on the household division of labour, particularly the share of male partners in household work, which constitute essential but somehow unaddressed issues.

Having explored aspects pertinent to work-life balance in women, the following section provides the importance of maintaining work-life balance.

4.7. The importance of maintaining work-life balance

Even though responsibilities toward personal, family, and social life roles are certainly crucial, each employee often has to devote a greater part of the day at their organisational setting to satisfy the multifaceted work demands (Poulose & Sudarsan, 2017). It had been projected that in the future work-life issues in general would become an even more important part of human resources management, as most people continued to struggle with reconciling the demands arising from different life spheres during at least some phase of their working career (Hammer, Van Dyck, & Ellis, 2014). In addition, Lee and Steele (2009) opine that, employees' lives are holistic and comprise many roles, resulting in complex interactions between their work and non-work lives. Organisational responses to this could include ignoring employees' non-work lives (separation), active involvement (integration), or creating flexibility and tolerance, thereby enabling employees to manage conflict (respect).

Having said that women entering the workplace has also brought additional complexities.

An early study by Bosch (2011) noted that women worldwide were gaining access to better educational and work opportunities, and their role in the workplace was changing radically. Although statistics showed that there had been an increase in gender diversity within South African workplaces, it was also evident that women still occupied lower-paid and lower-skilled positions within the economy (Bosch, 2011). The trend of women entering and staying in the workplace meant that research must focus on a broader understanding and a better grasp of how to strengthen and empower women in their workplace role (Bosch, 2011).

Work-life balance is a "hot topic in academic research and in professional business practice" (Mescher, Benschop & Dooreward, 2010:21). Creating and sustaining work-life balance is complex. Work-life balance is important as it may affect whether individuals pursue careers in ICT, and ultimately advance those careers in that field. Downes and Koekemoer (2011) were of the view that organisations that invested heavily in work-life balance reported lower employee turnover.

Potgieter and Barnard (2010) noted that one of the driving factors behind the increased interest in work-life balance had been the decreased differentiation between work roles and home roles, particularly related to space and time boundaries. In part, this is a consequence of an increased usage of Information Technology and home offices, flexible working hours, entrepreneurial activities, as well as other changes in the way people work.

Work-life balance is an area of interest for employers and researchers, may affect employees' success, job satisfaction, and could be considered the key driver of an individual's career decision (Chawla & Sondhi, 2011). It is important to note that WLB is a concept that is relevant for all working people, regardless of their life and family circumstances (i.e., also for single, childless employees without other care-taking responsibilities) since it captures the individual's capacity of doing well in the things they care about (Kossek, Valcour & Lirio, 2014).

The concept of WLB originates from the Western world where it has been researched at length in the past four decades. In his work, Naithani (2010) explained how WLB had evolved over the past four decades. Naithani (2010) divided the time periods into eight phases which the WLB theory travelled through until its present state. Earlier the whole family got involved in the struggle of survival. That was followed by the era of Pre-industrialisation, when workplaces were separated from family life. Later during the Industrial revolution, the segregation of work and family was strengthened. During this time, men dominated the workforce. In the next stage, division of labour encouraged the separation of work and family to higher level. As humanity progressed, in line with technical innovation, the male-dominated workplace started to depend largely on technology. Soon technology played a major role at the workplace, and the domination by men began to fall, which facilitated the introduction of WLB facilities. Considerable global growth in women joining the workforce pushed a demand for the WLB programmes (Gurney, 2010; Naithani, 2010). This is especially encouraged in the ICT sector, which studies by Prescott and Bogg (2015) Abbasi (2011: 63) highlighted that males dominate the ICT field, and women are under-represented.

Having explored importance of maintaining work-life balance, the following section provides global studies of work-life balance of women in Information and Communication Technology.

4.8. Global studies of work-life balance of women in Information and Communication Technology

To carry out an up-to-date study, it was important to see how many studies on work-life balance and females employed in the Information and Communication Technology, had been conducted in the past 5 years. In the studies, various outcomes cannot be generalised to the South African setting given the differences in country profiles, in terms of demographics and

level of development and thus a more home-grown approach was needed to have a generalisation for the current study.

Table 4.1 presents global studies of work-life balance of women in Information and Communication Technology.

Table 4. 1: An overview of global studies of work-life balance of women in Information and Communication Technology

Author (s)	Title of study	Themes covered	Type of study	Limitations	Region
Zikode (2020)	The career advancement experiences of female managers in the ICT sector	• Career advancement, • Experiences • ICT sector • male-dominated • Senior leadership • Transformation.	Exploratory qualitative study.	• Challenge in selection and interviewing participants. • Scarcity of female managers in the ICT sector • Demanding schedules of participants	South Africa.
Aranda and Jerrard (2019)	A comparison between Australia and Chile of factors facing women engineers and ICT professionals in their careers.	• Work-life balance • ICT women engineers.	Comparative study.	• Too many theories fitting the same data for this study.	Australia and Chile.
Brue (2019)	Work-life balance for women in STEM leadership.	• Women leadership • Science, Technology, Engineering, and Mathematics (STEM).	Qualitative study.	• The sample size was too small.	South-central United States.
Atouba and Lammers (2018)	Examining the relationships between participative organisational communication practices and burnout among IT professionals.	• Employee work participation • Internal communication • Burnout symptoms.	Quantitative study	• The use of self-report measures made it nearly impossible to completely rule out bias.	Midwest of the United States.
Brue (2018)	Harmony and Help: Recognising the Impact of work-life balance for Women Leaders.	• Women leaders • Work-life balance • Work-family conflict.	A Qualtrics website survey.	• The cross-sectional nature of the study was a limitation.	South-central United States.
Fazili and Khan (2017)	A study on the Impact of ICT on Work Life Balance	• ICT	Quantitative study	• A mixed methods approach could be used assist in yielding richer results.	India.

		• Technological Innovations work-life balance • Tele-commuting.			
Padmanabhan and Kumar (2016)	Work-life balance and work-life conflict on career advancement of women professionals in Information and Communication Technology sector, Bengaluru, India.	• Work- Life Balance • Work- Life Conflict • Women Professionals, Information and Communication Technology (ICT).	Quantitative study	• The sample size was too small.	India.
Omamo, Abagi and Sifuna (2015)	Highlighting the convolution that is the ICT world: Professional career women in Kenya speak.	• Professional career women • Information and Communication Technologies (ICT) • Work-life balance.	Qualitative study	• The sample size was too small.	Kenya.
Pretorius, Mawela, Strydom, de Villiers and Johnson (2015)	Continuing the Discourse of Women in Information Technology: A South African Perspective.	• Gender • Women IT • South African careers.	Qualitative study	• More research needs to be conducted.	South Africa.

(Source: Researcher's own construction)

This section examines the outcomes of the studies from Table 4.1., the global studies of work-life balance of women in Information and Communication Technology.

The first study examined in this study by Zikode (2020) in South Africa explored women's career advancement and experiences in a male-dominated field. In addition, women's senior leadership, and transformation in the ICT sector were also main highlights of the study. The survey by Zikode (2020) utilised exploratory qualitative research. The data analysis approach of the interpretative phenomenological analysis (IPA) methodology was used for this study. The study aimed to identify the meaning(s) behind participants' experiences. The study had limitations in selecting and interviewing participants due to the scarcity of female managers in the ICT sector and their demanding schedules. The study found an imbalance in women's representation at senior management levels in the participating organisation (when the research was conducted). In South Africa, the study revealed that very little is known about the factors influencing women's retention and advancement.

Zikode (2020)'s study opted for a sample size of ten, which can be considered relatively small. A small sample implied that it could mean limited insight was gained. Furthermore, Zikode (2020) focused on the experiences of female managers in just one single organisation. As a result, the results cannot be generalised across the entire ICT sector in South Africa.

The second study by Aranda and Jerrard (2019) was a comparative study conducted between Australia and Chile, which compared work-life balance and ICT women engineers. The study revealed the similarities and differences between Australia and Chile regarding gender inequalities and discrimination. The study also highlighted the experiences women faced that impacted their career decisions in ICT-related fields. The limitation of the comparative research by Aranda and Jerrard (2019) was that too many theories fit the same data for this study.

The third study by Brue (2019), a qualitative research had themes centered around women leadership and Science, Technology, Engineering, and Mathematics (STEM). The study was conducted in the South-central United States. The study found that most support for women in ICT came from spouses or significant others, female co-workers, and mentors outside the employer organisation. The study's limitation by Brue (2019) was a sample size of 21 participants being too small.

Another limitation was that while the nature of the study by Brue (2019) was investigatory, a more extensive investigation of types and sources of support could provide additional insights into this dynamic. Respondents represented various STEM fields and organisations and yet were all part of a STEM professional group. While respondents were asked to consider the support sources and types which reinforced their individual leadership development,

participation within the group could have skewed results, overly representing the benefits of social support outside of a leader's organisation. Additionally, data in this study were self-reported, and perceptions can be subjective. The use of a cross-sectional research was also a limitation as longitudinal research would provide clarity as to the benefits of social support dynamics and work-life balance initiatives to women in STEM leadership roles. This study by Brue (2019) did not focus on the types of information with which women in STEM perceive as of value, nor how the specific function of social support affects women in STEM leadership roles. Additionally, organisational-level support was not investigated within this study as having a potential impact on an individual leader's work-life balance.

The fourth study Atouba and Lammers (2018), was a quantitative study conducted in the United States' Midwest. The study found that internal communication adequacy and employee work participation were critical factors against burnout, especially among knowledgeable workers.

This study was part of a more extensive investigation of factors that shaped knowledge workers' organisational experiences. The research was conducted over several months at technology management services (TMS), an information technologies (IT) company owned by a university in the United States' Midwest. The study used purposive sampling and targeted IT workers (engineers, technicians, systems/network support personnel) employed at TMS.

This study's limitation was that the use of self-report measures in this study made it nearly impossible to completely rule out the possibility that respondents' dispositions when completing the survey and standard method bias may have influenced the respondents' answering the questions posed to them. The other limitation was that the study relied on cross-sectional data, which the study cautioned subsequent researchers to be cautious about inferring causality from the study's findings. To counter such a limitation, the study recommended that future research in this area could involve using different methods and designs to investigate the links between communication practices and job burnout. Additionally, the study relied on data gathered from a single organisation and a specific type of knowledge worker, therefore, limiting external validity.

The fifth study by Brue (2018) utilised a Qualtrics website survey in the South-central United States that explored women leadership and work-life balance and aspects of work-life conflict. The study indicated that time-based work-family conflict was slightly more apparent than strain-based conflict for ICT women in leadership. For Brue's (2018) research, 93 women leaders who were members of a women-only professional association were identified as potential respondents. A women's only science, technology, engineering, and mathematics group (45 members) and a women's only business professional group (48 members) in the

south-central United States were identified as potential respondents in the study. Findings pointed out that ICT women leaders' work interfered with their family more than their family interfered with their work. The small sample size limited the applicability of results and merits additional attention with further research. The study by Brue (2018) only provided a snapshot view of work-life balance. In future research, examining this dynamic within a longitudinal research project would afford clarity about the effects of social support, work-family blurring, and work-family conflict on women in leadership roles.

The sixth study by Fazili and Khan (2017), a quantitative research, explored the areas of ICT and technological innovations, work-life balance, and telecommuting. Fazili and Khan's (2017) survey conducted in India indicated that homeworking had greatly enhanced time-space flexibility. The use of professional communication tools like emails brought accessibility in sharing and collaboration of work. This study's limitation was using one methodology, which was the quantitative method, which limited the prospect of yielding richer results.

The seventh study by Padmanabhan and Kumar (2016) conducted a quantitative research in India. The study looked at women professionals in the Information and Communication Technology (ICT) sector and their work-life balance and work-life conflict. The study consisted of 75 Information and Communication Technology (ICT) women professionals surveyed from 7 various ICT organisations from Bengaluru in India. The study found evidence that there was concern among female ICT professionals working in shifts. The findings pointed to the effect of working in the ICT industry and what it brought on work on family conflict, family on workplace conflict, and a highly significant relationship between work-life balance (WLB) and work-life conflict (WLC). The study's limitation was utilising a small sample size for a quantitative research that could not be generalised to India's ICT industry. The use of a mixed-methods approach could have yielded more robust results.

In the eighth study conducted in Kenya by Omamo, Abagi, and Sifuna (2015), a qualitative research explored women's professional careers in the Information and Communication Technologies (ICT) concerning the work-life balance. The study examined women's educational backgrounds, career progression, experiences, and challenges they face or have faced through exploratory interviews. The study found that parental attitudes towards females in ICT were essential to empower women from an early age. Thus, the parents were found to be influential in their female children's education and career choices. In the study findings, education was highly valued in all the families. This study's limitation was that the sample size was too small and could not be generalised to the ICT sector in Kenya.

Finally, the ninth study by Pretorius, Mawela, Strydom, de Villiers, and Johnson (2015) conducted in South Africa utilised a qualitative method. The survey by Pretorius et al. (2015) used a critical interpretive analysis, using the experiences of 48 women who worked in private sector IT firms. The study was used to investigate what attracted women in South Africa to the IT industry and what discouraged them from following a career in this field. The study looked at the gender and careers of South African women in IT. The study indicated that South African women faced strikingly similar challenges in work and home environments and shared the same perception internationally. The IT industry was more functional, logical, task-oriented, consisting mainly of programming and building hardware (computers and networks). This study being one of the few South African studies conducted, recommended that more research needed to be undertaken to provide a more in-depth understanding of the socio-economic, cultural, and political aspects underpinning women in the South African IT industry.

The definition of home and work is central to the understanding of the work-home interaction. Intuitively, work and home (non-work) are conceived as two interdependent aspects of human living (Van Aarde & Mostert, 2008), which significantly impact individual behaviour in terms of how daily activities and energy are structured. However, Murphy and Doherty (2011) assert that it is not possible to measure work-life balance in an absolute way because personal circumstances influence the way this is perceived.

Having outlined highlighted the work-home interaction, the next section presents a brief overview of international legislation on work-life balance to understand how the issue of work-life balance is being handled globally.

4.9. International legislation on work-life balance

The International Labour Organisation's Convention No. 156 requires that signatories make it a point of national arrangement, that all labor workforce with family responsibilities – both female and male – can take part in work without separation or, quite far, clash amongst work and family commitments. To this end, the Convention advances an arrangement of guidelines including leave strategies, social care administrations, standardised savings, adaptable working times, work organisation provisions, workforce reintegration arrangements, gender orientation responsive guidelines and education. These provisions are found in Articles 4 to 7. Razavi (2007:6) in looking at women noted that, “even as more women than ever work for pay, they continue to bear a disproportionate burden of caregiving work for dependent family members

such as children, the elderly and members with disabilities or illnesses and available data shows that everywhere women still spend considerably more hours in unpaid care work.”

In South Africa, labour legislation has been passed to assist employees and employers alike on labour issues, but there remains a struggle with Work-Life Balancing and Quality of Work Life challenges, necessitating that South Africa adopt more progressive Quality of Work Life legislation, in order to move to par with developed countries. There is very broad legislation that could address the Quality of Work Life in South Africa, but the main challenge could still remain, in the implementation and enforcement on the ground. The section that follows presents South African legislation on work-life balance.

4.10. South African Legislation on work-life balance

The upsurge of advancement is impacting humans in all facets of life. So, the question lies in what is being done in South African to assist the gender equality agenda. During recent years, South Africa has seen the use of different administrative instruments directed at changing the gender disparity – from the Broad-Based Black Economic Empowerment (BBBEE) Codes to the Employment Equity Legislation. Despite all these pieces of legislation, the willingness of the targeted people to work hard is what will determine the success of such initiatives.

Approximately three decades ago, South Africa implemented particular laws which prevented women from various human rights, such as not being allowed in some designated areas, or not being allowed to work in particular industries and sectors. The Bill of Rights was the first form of recognition that addressed gender inequality and was specifically designed to redress the issue of women’s rights in terms of giving them the same equal rights as males. This piece of legislation was the second chapter of the South African constitution adopted on 8th of May 1996. Bosch (2011) stated that, within the South African work environment, government put in place various legislations which addressed unfair discrimination and emphasised the fair treatment of all employees.

The South African labour environment is highly regulated and the following are some pieces of legislation that are aimed at addressing work-life balance and quality of work-life challenges in the South African context.

Basic Conditions of Employment Act 75 of 1997: The Basic Conditions of Employment Act (BCEA) 75 of South Africa (S.A) (1997) forms the employee's employment contract. It regulates factors that are related to the (QWL) such as working time, leave and remuneration. Section (10) of the BCEA 75 of S.A (1997) is an important section as it stipulates how employers should manage their employees in terms of workload, time allocation and their Quality of Work Life (QoWL). Section 7(d) of the BCEA 75 of S.A. (1997) deals with the issue of family responsibility, how to regulate working time to create a work-life balance.

The Labour Relations Act (LRA) 66 of 1995: This is another form of legislation which aims to promote economic development, social justice, labour peace and democracy in the workplace. These policies are also a form of protection against employees to ensure that they are not abused or exploited by their employers. According to Geldenhuys (2016), The Labour Relations Act 66 of 1995 ('LRA') provides the remedies that may be afforded to employees whose dismissals are found to be unfair.

The Gender Equality Act 39 of 1996 and Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000: These two other pieces of legislation are aimed at promoting gender equity, unfair discrimination, and specifically accommodating women in the workplace, taking into consideration the different roles women occupy in society, that is, a working person and that of the caregiver in the family and the home. This is done to assist in work-life balance issues, among other issues like workplace integration.

According to Bobbitt-Zeher (2011) & Cha (2013), research on gender inequality has posited the importance of gender discrimination for women's experiences at work. Previous studies have suggested that gender stereotyping and organisational factors may contribute to discrimination. Yet, it is not well understood how these elements connect to foster gender discrimination in everyday workplaces. Moosa (2017: 12) also added that, "along with various forms of legislation, which seek to promote gender equality in the workplace, it is expected of organisations to devise their own policies to promote the inclusion of women in the workplace. However, many organisations go beyond just the basic conditions of the laws and actively try to promote the inclusion of women in the workplace."

The other legislations in South Africa are the Employment Equity Act 55 of 1998 and the Skills Development Act 97 of 1998. They are discussed in the next section.

Employment Equity Act 55 of 1998: The purpose of the Employment Equity Act 55 (EEA) of S.A. (1998) is to make provisions for pregnant women in terms of affording them fair labour

practices by not discriminating against them. The South African EEA 55 (1998) addresses an important aspect of life because it affords employees the opportunity to plan how their family roles can be defined. For example, a woman can take family responsibility leave to take a sick child or any other relative to the hospital, without fear of losing her job. In addition, The South African Employment Equity Act 55 of 1998: Code of Good Practice on the integration of Employment Equity into Human Resource Policies and Practices takes cognisance of the issue of pregnant women, and parents by giving a provision for antenatal care leave. In addition, the importance of an act such as the Employment Equity Act 55 of 1998 is highlighted by Strazdins, Clements, Korda, Broom, and D'Souza (2006) in their survey asserted that, many children live in families where one or both parents work evenings, nights, or weekends.

Skills Development Act 97 of 1998: The sole purpose of the SDA (1998) is to have an improved South African work force. In relation to the current study where ICT is a fast-paced changing environment, for example, women who may need to take time off work to go on maternity leave or take care of other family responsibilities that may hinder them from performing their work duties at the optimum, or improving their skills, this provides an excellent tool of legislation to use. The Sector Education and Training Authorities (SETAs), established under this act, provides opportunities for further development.

Barbieri, Lelleri, Maxwell, Mollard, Karu, Salanauskaitė, and Reingardė (2018) emphasise the importance of upscaling skills especially in a fast-changing environment. Morgan (2012) outlines that formalised leadership and technical training as well as mentorship programmes with managers (especially female ones) can encourage female ICT employees to stay in the industry and seek advancement while providing them with clearer paths to vertical mobility. This approach according to Morgan (2018) is especially important given evidence of employers 'guiding' women into particular job roles on the 'softer' side of computing, such as technical writing, quality assurance, and training, even when those women express an interest and desire to work in more technical areas such as programming.

Formal flexible work policies may be available in workplaces but can be unevenly implemented across work units by supervisors and may be selectively available to higher status workers (Thompson, Beauvais & Lyness, 1999). This is not the case with Telkom's policies. Having looked at South African legislation on work-life balance, the next section presents the document analysis of the work-life balance policy and programme at Telkom.

4.11. Work-life balance policy and programme at Telkom

Telkom offers several workplace provisions that guide work-life balance initiatives, as provided by the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the virtual assistance programme of *Telkom Touch*. The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 is a policy that stipulates work conditions as per the Republic of South Africa’s labour laws. The other provision is the *Telkom Touch*, a virtual assistant used at Telkom, which facilitates a comprehensive lifestyle management service for employees at every level. For each policy and programme, details are provided on the type of provision, how it addresses work-life balance need(s), and any specific conditions that involve employee access and use. The policies and programmes were obtained from the Human Resource Information System (HRIS) system of Telkom.

This section presents the document analysis for the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, and the virtual assistance programme of *Telkom Touch*. Table 4.2 shows how the three main themes fit with the policy and programme at Telkom.

Table 4. 2: How the three main themes fit with Telkom’s work-life balance policy and programme

Work-life balance policy and programme at Telkom		
Themes	Policy	Programme
	The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015	<i>Telkom Touch</i>
Theme 1: Work-place initiatives at Telkom	Workweek Flexible Working Hours Reduced Workweek Hours of Work Meal Intervals	Employee Assistance Programme Wellness Programme
Theme 2: Telecommuting arrangements at Telkom	Working from home closer to home Shift work Changing Shift Schedules Overtime Call-out (also referred to as <i>T-421</i>)	Flexible working (parents and carers of adults in need of care) Flexitime Telework
Theme 3: Work and leave arrangements at Telkom	Over time Work on Sundays Work on Public Holidays Overtime for Management and Specialist Levels	Educational Leave Exceptional Leave Family Responsibility Leave Bereavement Leave Educational Leave Medical, Dental, and Related Leave

According to Park and Jex (2011), whilst the research begins to explore the kind of work people do, there is little research that considers the extent to which these tactics are used in practice, by whom, or how effective they are at enabling people to manage their work-life balance in a way that suits them.

The next section looks at Theme 1: Work-place initiatives at Telkom on Hours of Work: (Other Working Opportunities and Overtime) of 2015, as well as the *Telkom Touch*.

4.11.1. Theme 1: Work-place initiatives at Telkom

Richardson (2010) opines that new work arrangements are common as changes in organisational forms have increased diversity in work processes and practices. This has included a growing trend towards allowing employees to work from home (i.e., flexiwork) one or more days a week or, in some cases, permanently. Chung and Van der Lippe (2018) opine that flexible working can be a useful tool to further enhance gender equality in our societies. However, an earlier study by Randolph (2016) affirmed that in a busy modern workplace, many employees had little time to take breaks.

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, sub-themes identified under the working schedules theme at Telkom are; workweek, flexible working hours, reduced workweek, hours of work and meal intervals.

The next section looks at sub-theme 1: Hours of work under theme 1: Work-place initiatives at Telkom.

4.11.1.1. Sub-theme 1: Workweek

The workweek at Telkom was noted to observe a 42-hour workweek, the traditional workweek of Monday to Friday, and office hours of 07:30 – 16:30, in a way to have employees work within the confines of the law, that is, the Basic Conditions of Employment Act 75 of South Africa (BCEA) of 1997. As an organisation, Telkom acknowledged that working hours play a vital role in the job and have a direct bearing on the standard of living. A study by Grzywacz and Marks (2000) found that resources (e.g., decision latitude and learning opportunities) were strongly related to work-family enrichment but had no relationship with conflict. Similarly, workplace demands (e.g., working extra hours) were strongly related to work-family conflict yet had no relationship with enrichment.

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, prescribes core times for employees, the hours (07:30 – 16:30). The description of hours outside

of the prescribed hours of work (07:30 – 16:30) are categorised under flexible working hours. Subsection D of the Telkom policy states that a working day can start from 09:00 to 14:00, 10:00 to 15:00. The guiding principles of flexible working hours are that there should not be any adverse effects on organisational functionality and all organisational objectives should be met. The system should be regulated for employees to work a 42-hour workweek according to the work structure. The staff must be present and available for work, subject to sickness and other authorised absences, and all this in line with the Basic Conditions of Employment Act (BCEA) 75 of South Africa (1997). The next section looks at sub theme 2: Flexible Working Hours.

4.11.1.2. Sub-theme 2: Flexible Working Hours

Flexible time means the hours outside core time, but within the prescribed hours during which staff may arrive or depart. Core time means those times within the general hours during which all staff must be present and available for work, subject to sickness and any other authorised absences. The guiding principles of flexible working hours are that;

- They should first have no adverse effect on the organisation's services and functions. The core time provisions must be adequate and sufficient to meet the company's business requirements.
- Meet operational requirements and customers' needs, a system of regulated flexibility may be adopted, according to which employees could work a 42-hour week according to a work structure. The working week may be averaged out over up to 4 weeks (182 hours) per business needs.
- The 42-hour workweek can start and finish on any day of the week and at any time, on a working day.
- Depending on the specific business needs, the typical working day should be between 06:00 to 18:00 hours. Work performed outside these times would be regarded as "night work", and employees regularly performing duties outside these hours would be entitled to a compensation, a night duty allowance.
- Employees must be at work during core times to ensure sufficient staffing and customer service. The standard core times being between 10:00 – 12:00 and 14:00 – 16:00. Service organisations, however, may adjust these times according to their specific business requirements.
- Employees who work more than five consecutive hours per day must be afforded a lunch break of 45 minutes - 15 minutes of which are regarded as service to calculate an

employee's prescribed working hours. The meal interval of 45 minutes can be taken between the hours of 12:00 to 14:00.

- Saturday and Sunday can be included as part of the workweek, which means that a 'weekend' could fall on any other two days other than Saturday and Sunday, e.g., the 42-hour workweek could start on Wednesday, and end on Sunday, meaning Monday and Tuesday would become the 'weekend.' The next section looks at sub theme 3: Reduced Workweek.

Facer and Wadsworth (2008) conclude that, the concept of work linked to technology as "anytime and anywhere" has caused work/life effectiveness (WLE) by alternative and flexible work schedules, a positive feeling for total life management increase productivity at work.

The next section looks at sub theme 3: Reduced Workweek.

4.11.1.3. Sub-theme 3: Reduced Workweek

Reduced workweek means working 5 to 8 hours or 25-hour work week, on a 5-hour per day basis. The Core Principles of the reduced workweek are: Each Service Organisation may decide on the feasibility of introducing a shorter working week. However, the provision does not provide an automatic right to work reduced hours as business needs determine its feasibility. Employees that volunteer to work reduced hours are expected to accept a commensurate reduction in salary and benefits.

Other core principles state that any employee who applies for a reduced working hour position, will be deemed to have requested a permanent change to their employment contract. Employees are required to sign a contract with the new conditions of employment applicable to the reduced hours of work position. Where business needs allow for the introduction of reduced working hours, one full- time position should be converted into one reduced working hours' position. The conversion of jobs may not increase headcount. Where business needs require a reduced working hour position, the position can be reversed back to a full-time position. The next section looks at sub theme 4: Hours of Work.

4.11.1.4. Sub-theme 4: Hours of Work

The working week is stipulated as 25 hours per week and the working week consists of five working days and five hours per day. Depending on the specific business needs, the regular hours of work can be 06:00 to 18:00hrs, with core times of 10:00 to 12:00hrs and 14:00 to

16:00hrs. For example, a working day can start from 08:00 to 15:00hrs, 11:00 to 16:00hrs. The next section looks at sub-theme 5: Meal Intervals.

4.11.1.5. Sub-theme 5: Meal Intervals

There are no meal intervals at Telkom because a meal interval should be taken after working for five hours continuously. This means that an employee may only take a break for a meal after working for 5 continuous hours.

Having looked at the Telkom policy, the Hours of Work: (Other Working Opportunities and Overtime) of 2015, the next section looks at the **Telkom Touch** under sub-theme 1: Work-place initiatives at Telkom. The **Telkom Touch** had two sub-themes: Employee Assistance Programme and wellness Programme. The next section looks at sub-theme 6: Employee Assistance Programme.

4.11.1.6. Sub-theme 6: Employee Assistance Programme

Unlike the initiatives that grant short or more extended time off from work, the Employee Assistance Programme (EAP) may be best described as a service-based initiative. According to information gathered and consultations with Telkom SA SOC Ltd's human resources personnel, there are several services offered under the EAP, which include child and elderly care referral services, personal counseling, nutrition planning, and legal advice. Telkom SA SOC Ltd monitors the EAP programme's general use through aggregate reports from the EAP provider, which, to uphold confidentiality, does not provide any identification details of the employees. All employees, permanent, term, and temporary, can engage in the EAP. Notably, the official policy encourages Telkom SA SOC Ltd employees to avail themselves for the EAP if their unwellness is adversely affecting their job performance. Zheng, Molineux, Mirshekary, and Scarparo (2015) opine that work-life balance (WLB) is an issue of focus for organisations and individuals because individuals benefit from better health wellbeing, they have WLB, and this, in turn, impacts organisational productivity and performance.

The next section looks at sub-theme 7: Programme and wellness Programme.

4.11.1.7. Sub-theme 7: Programme and wellness Programme

Telkom SA SOC Ltd has a wellness programme for employees, which consists of several different initiatives targeted at employees' health and well-being. This works in conjunction with the **Telkom Touch** system, which operates as a reference point for employees. For example, employees can access discounted gymnasium memberships, subsidies for purchasing

personal fitness equipment, sponsorship for sports competitions, an on-site fitness facility, workshops for improving personal health, and other health-related services on-site blood donor clinics. The wellness programme provides services to employees to help with their work-life balance.

Some wellness programmes are offered during regular workdays, and on-site in the office building, such as the blood donor clinic, and workshops on mental health. Other components can be pursued outside of the workplace and outside of regular working hours, such as fitness classes. Telkom SA SOC Ltd employees can seek the wellness programme without their supervisors or managers' permission, or formal request.

If utilised together, the work-life balance programmes at Telkom SA SOC Ltd provide services to address employee work-life balance needs in areas of childcare and health or wellness. Employees can engage in the programmes according to their own needs, without negotiation with their supervisors or managers. Notably, the programs do not have much to do with the time and space structure of work at Telkom SA SOC Ltd, but offer more external services to enhance work-life balance.

This concludes the section on the thematic analysis of Theme 1: Work-place initiatives at Telkom. The next section looks at Theme 2: Telecommuting arrangements at Telkom.

4.11.2. Theme 2: Telecommuting arrangements at Telkom

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 identified under the telecommuting arrangements theme: Working from or closer to home, shift work, changing Shift Schedules, overtime, and call-out (also referred to as *T-421*). The next section looks at Sub-theme 1: Working from Working from or closer to home.

4.11.2.1. Sub-theme 1: Working from home or working closer to home

The policy also describes the concept of 'home office' and workplace. 'Home office' means workspace at the employees' home allocated for work, and 'Workplace' means any premises or place where a person performs work during his/ her employment. The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 also describes 'hot-desking' by stating that, 'Hot desking' means a workplace provided by the company at the formal workplace for the employee's use, working from home. The idea of working from home is according to Wheatley (2012) beneficial to women who have decided to participate in the labour market. However, Song and Gao (2018) find that working at home is associated with a

higher probability of having unpleasant feelings relative to working in the workplace. However, there is also a benefit of cost saving employees are not paying for the commute (Rogers, 2011).

The Human Resource Department is tasked with undertaking feasibility, and a pilot study, to ascertain the advantages and disadvantages associated with the introduction of working from home, and analysing and redesigning of work jobs based on the fact that technology has made it possible to use it any place. The success of working from home lies with the employee, job suitability and Telkom's ability to stipulate the terms for health and safety issues. Working from home requires that employee's performance levels excel to meet their contractual objectives, and if the performance levels decline, the arrangement could be re-evaluated.

The policy firstly outlines the employees' responsibilities, including familiarising themselves with the Telkom work from home policy, presentation of applications for working from home, in writing to respective Line Managers, and the employee's agreeing to undergo the screen evaluation tests to determine suitability. Other employee responsibilities require providing a dedicated work area at home, a place that is safe for the employee and others entering it and establishing an agreement on work practices that make the work arrangement transparent.

Other requirements include; attendance of regular meetings at designated times at the official office, assurance of employee availability within a reasonable time, as agreed with the Promoter, and constant touch with other work colleagues in a bid to keep up to date with Telkom's activities.

Lastly, the policy considers the observance of the Business Code of Ethics, company policies and procedures, and all other terms and conditions of employment and employee observance of applicable legislation, for example, Tax legislation and Occupational Health and Safety. The next section looks at the next sub-theme of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which is shift work.

4.11.2.2. Sub-theme 2: Shift work

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 under the working schedules sub-theme takes note of shift work, average hours of work, and a compressed workweek. Shift work means work comprising a relay of periods of duty and "averaging of hours of work", which means that an employee may not be required or permitted

to work more than 42 hours in a week, or more than an average of 5 hours' overtime in a week, over the agreed period averaged out over 4 to 8 weeks.

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 states that an employee may not be required or permitted to work more than 42 hours per week, more than 10 hours' overtime, or more than five days in any one week. The next section looks at the next sub-theme of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which is changing Shift Schedules.

4.11.2.3. Sub-theme 3: Changing Shift Schedules

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 addresses; changing Shift Schedules where it is stated that management may make temporary changes in the shifts. This may result in changes in the schedule and may require meeting unusual or emergency targets. Employees of Telkom may trade their shifts with other employees at Telkom, for a period not extended to more than one change, unless business dictates otherwise. This takes into account rest periods as stipulated by the Basic Conditions of Employment Act (BCEA)1997 and section 9.6 of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015.

The trade of shifts has to be regulated by management, to avoid unfair labour practices, such as the same employees trading their shifts regularly, thus contravening legislative requirements. The design of shift rosters is outlined in the policy. The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) (2015) stipulates that shift rosters be developed in consultation with affected employees, with consideration given to:

- i. Childcare needs of the employees;
- ii. Availability of public transport;
- iii. The personal safety of employees concerning such transportation and issues of occupational health and safety.

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) (2015) also states that allocating employees to Shift Schedules and Supervisors, in consultation with the employees, gives employees shifts based on the business and operational demands. Employee needs, such as the following, should be considered in the scheduling of shifts:

- i. Pregnancy and breastfeeding
- ii. Family responsibilities or obligations
- iii. Elderly age
- iv. Disability

- v. Underlying health problems
- vi. Part time studies
- vii. Personal preferences for scheduling own free time.

The next section looks at the next sub-theme of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which is overtime.

4.11.2.4. Overtime

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, also makes provision for overtime, ordinary hours of work, and travel time. The term ‘overtime’ is defined as when an employee works more than regular hours of work/scheduled shift during any given day or week. In Telkom, the ‘ordinary hours’ of work are 42 hours per week, and ‘travel time’ is the actual time spent traveling from home to the place of work, when working overtime. The next section looks at the next sub-theme of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which is Call-out (also referred to as *T-421*).

4.11.2.5. Call-out (also referred to as *T-421*)

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 addresses the Call-out (also referred to as *T-421*). The ‘call-out’ is when an employee is called out after ordinary hours of work/scheduled shift by a duly authorised supervisor/manager according to the guidelines that regulate such an event, to perform a specific duty/repair a fault. The next section looks at the third theme of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which is work on non-standard days/times at Telkom.

Having looked at the Telkom policy, the Hours of Work: (Other Working Opportunities and Overtime) of 2015 under theme 2, the next section looks at the ***Telkom Touch*** under Theme 2: Telecommuting arrangements at Telkom. The Telkom Touch had three sub-themes: Employee Assistance Programme and wellness Programme.

4.11.2.6. Sub-theme 6: Flexible working and care for elderly persons

According to the Telkom Touch manual (2018), Telkom is committed to helping working parents following the policy statement on flexible working. Parents of children aged under 17 or disabled children aged under 18 have the right to apply to work flexibly. Employees who

have responsibility for adults in need of care also have the right to work flexibly. Telkom will consider all such requests carefully and responsibly. The Telkom Touch programme stipulates that the right to apply to work flexibly does not provide an automatic right to work flexibly as there may be circumstances when Telkom Ltd cannot accommodate an employee's desired work pattern. The right is designed to accommodate the needs of both employees who are parents/carers and those of Telkom and aims to facilitate discussion and encourage both an employee and Telkom to consider flexible working patterns and to find a solution that suits both parties. The next section looks at sub-theme 7 which is flexitime.

4.11.2.7. Sub-theme 7: Flexitime

Sweet, Pitt-Catsoupes, Besen, and Golden (2014) assert that, while most employers offer flexible work arrangements to some of their workforces, few offers these to most of their workers. Those employers who offer flexible work options rely most heavily on flexibility in scheduling and workplace work. Seldom do organisations make options of reducing work and pausing job available to the majority portions of their labor forces.

Flexitime is a working practice at Telkom SA, and it is most commonly understood as adjusting start and end times of a workday to accommodate employees who meet organisational objectives best. Telkom employees who are eligible to take the flexible working option an employee will have worked with Telkom continuously for at least 26 weeks on the date at which an application is made must not be a contract work or have made another application past 12 months. The application procedure for flexible working patterns is that an employee should submit a considered application from their line manager in writing to the Human Resources Department. Moreover, according to Tausig and Fenwick (2001), apparent control of work schedules, that is choosing working time increases work-life balance in terms of family and work. Gilson, Maynard, Young, Vartiainen, and Hakonen (2014) also assert that technology has made life much more comfortable in that people can contact any time as long as they have access to it immediate attention to issues that arise in an organisation or work setting.

An employee may make one application each year under the right, and accepted applications will mean a permanent change to their terms and employment conditions unless otherwise agreed. Therefore, it is essential that, before making an application, an employee considers which working pattern will help them best fulfill their care responsibilities and any effects change may have on Telkom's business and how these might be accommodated. The

application process for flexible working is the property of Telkom and remains a confidential and private process. This current study has no authorisation to outline the process specifically. Employees' rights regarding an employee's new working patterns will become part of their employment contract and may not be changed again unless agreed by Telkom and the concerned employee. Employees working flexibly continue to be subject to the Code of Conduct Policy. They may not carry out any business or employment not connected with Telkom during or outside working hours without permission.

The **Telkom Touch** programme makes provision for flexible working from home. The policy statement sets out possible arrangements and considerations that may allow staff to work from home and follow the procedures to make such requests. Working from home applies to all staff employed by Telkom on a contract of employment and to all secondees.

Working from home requires certain principles to be considered for the operation and applicability of this policy. The **Telkom Touch** manual (2018) states that the delivery of Telkom SA SOC Ltd's business needs are essential. Some guiding principles are:

- Some roles and tasks lend themselves to home working more quickly than others, and IT systems accessed at home need to be secure and robust.
- Consistency and fairness must operate across the organisation, and no additional burden is placed on other staff to provide extra cover.
- Sufficient staffing levels on-site throughout the working week are maintained, health and safety requirements are observed, and cost implications are minimal.

The next section looks at sub-theme 8 which is telework.

4.11.2.8. Sub-theme 8: Telework

Telework is another working practice at Telkom SA SOC Ltd. This is another flexibility-based initiative: Teleworking allows employees to adjust their workspace flexibly and perhaps also time. They can better manage their activities and continue to work full-time hours. According to Barber, Grawitch and Maloney (2016), a common assumption behind teleworking is that it can be an ideal option for women due to the advantages that it entails in terms of balancing work and family life. An early study by Tremblay (2002) questioned the impact of telework on work organisation and working conditions, particularly for women and work-family balance, since telework is sometimes presented as a solution to reconciling work and family responsibilities. In addition, Grobler and de Bruyn (2011) also mentioned flexible work arrangements as an effective solution to the work-life conflict.

This concludes the section on Theme 2: Telecommuting arrangements at Telkom. According to Shagvaliyeva and Yazdanifard (2014), the most widely studied workplace stressors are lack of organisational support, work overload, stressors, non-standard work hours (including long work hours). Additionally, a poll by Xobni (Inbox spelled backwards) (2010) found that the borders between work and family disappear due to new work arrangements.

Having said that, the next section looks at Theme 3: Work and leave arrangements at Telkom.

4.11.3. Theme 3: Work and leave arrangements at Telkom

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 related to the Theme 3: Work and leave arrangements at Telkom has the following sub-themes: Overtime, Sundays, work on public holidays, all of which may be on a volunteer or scheduled basis and overtime for management and specialist levels. The next section looks at Sub-theme 1: Overtime.

4.11.3.1. Sub-theme 1: Over time

The time worked in addition to an employee's regular working hours and, in this instance, may imply work on non-standard days or additional hours, such as working on a Sunday or public holiday. This option may be on a volunteer or scheduled basis. Overtime on a Sunday must be reimbursed a double the standard wage rate. The stipulations of the Basic Conditions of Employment Act (BCEA) 75 of South Africa (1997) guides the application of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015. Employees who typically work on Sunday must not be paid, but those whose shift is indicated as '*FREE*' on Sunday are entitled to payment. The policy also makes provision for changes worked over two days stating that whole shifts are regarded as working on the day on which the most considerable portion was used. The next section looks at Sub-theme 2: Work on Sundays.

4.11.3.2. Sub-theme 2: Work on Sundays

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 states that, if an employee does not ordinarily work on a Sunday, the employee must be paid double the regular primary salary rate time worked. This option may be on a volunteer or scheduled basis. If an employee ordinarily works on a Sunday (a shift that is part of the standard workweek), the employee must be paid one times his hourly rate in addition to his regular basic salary for time worked effectively from 1 April 2002. The next section looks at Sub-theme 3: Work on Public Holidays.

4.11.3.3. Sub-theme 3: Work on Public Holidays

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) (2015) provides employee payment on public holidays. The stipulation is that an employee may work voluntarily or on a schedule on a Public Holiday. Whether the employee usually works on this day or not, the employee will be paid double the regular salary rate. However, employees who have a public holiday as part of their typical workweek do not get paid, but the employees whose shift is indicated as 'free' on public holidays get paid. The policy also makes provision for changes over two days stating that whole shifts are regarded as having been done on the day on which the most considerable portion was done. The exception is when the more significant part of the change is on the nonpublic holiday, in which case the public holiday portion of the shift will be reimbursed at the public holiday rate. The next section looks at Sub-theme 4: Overtime for Management and Specialist Levels.

4.11.3.4. Sub-theme 4: Overtime for Management and Specialist Levels

The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) (2015) provides overtime for management and specialist levels stating that, except for ordinary hours of work, the legislation regulating working time does not apply to Management level employees (M5 and higher). The company does, however, acknowledge that, in some instances, overtime needs to be performed by high-level specialists (S5 and higher) on managerial levels. Every Service Organisation will, therefore, must determine which employees are to be regarded as high-level specialists in their organisations. Overtime performed by high-level specialists such as S5 and higher must be paid for their time, and the overtime rate is calculated restricted to a basic salary. The overtime payments are not to be paid to managers; these specialists report to as stipulated in the policy.

Having looked at the Telkom policy, the Hours of Work: (Other Working Opportunities and Overtime) of 2015 under theme 3, the next section looks at the Telkom Touch under Theme 3: Work and leave arrangements at Telkom. The **Telkom Touch** had six sub-themes: Employee Assistance Programme and wellness Programme.

4.11.3.5. Sub-theme 5: Educational Leave

The **Telkom Touch** programme makes provisions for employees with children to look after the children's welfare as the policy encourages employees to make time for their children. The eligibility of employees for Educational Leave entails that an employee must have up to one year's continuous service with Telkom and give the proper notice.

The policy also makes provision for parents of adopted children who may take leave on the fifth anniversary of the date of placement and a requirement for parents of disabled children who may leave up to their child's 18th birthday. The Educational Leave duration stipulates that employees can take up to 10 consecutive days of Educational Leave in total for each child, and parents of disabled children are entitled to a total of 18 weeks' Educational Leave. This leave is to be taken up in blocks or multiples of one week except for parents of disabled children who can take leave in blocks or multiples of one day.

The notification for Educational Leave must be in the form of 28 days' notice of the date on which an employee intends to start taking Educational Leave. The Educational Leave option is offered to enable employees to balance the needs of the workplace and home. Telkom understands the importance of employees to form bonds with their families as they spend much time at work. During Educational Leave, employee rights are preserved, and employment continuity is also protected during agreed Educational Leave. As for the return to work, the **Telkom Touch** outlines that where Educational Leave is taken for four weeks or less, an employee is guaranteed the right to return to the same job.

In the South African context, the government has ensured job security because there is a precise balance in terms of clarity and adaptability in labour legislation like Basic Conditions of Employment Act (BCEA) 75 of South Africa (S.A) (1997), the Labour Relations Act (LRA) 66 of 1995, the Gender Equality Act 39 of 1996 and Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000, Employment Equity Act 55 of 1998 and the Skills Development Act 97 of 1998.

Telkom ensures that all these statutory measures and employment rights are accessible so that employees know their rights and know what forms of recourse actions are available in unfair labour practices. The government also requires Telkom to be more responsive to the changing labour market and the need for Telkom to manage and update their approaches to the changing needs of their workforce. Telkom recognises a range of circumstances when an employee may need to take time away from work, but that may not be reasonable for the employee to utilise annual leave or flex-leave. The next section looks at sub-theme 6 which is, Exceptional Leave.

4.11.3.6. Sub-theme 6: Exceptional Leave

The **Telkom Touch** programme states that Telkom employees have the right to Exceptional Leave, often at short notice, to deal with certain unexpected events or sudden emergencies involving a dependent and to make any necessary longer-term arrangements. Such leave will

be unpaid in most cases, but Telkom will exercise discretion in this respect on a case-by-case basis. The consideration of applications is done by line managers or Head of Departments. It is encouraged to explore a range of options to cover the need for time off, such as annual leave or flexi-leave or reduction of contractual hours. Sometimes, a mix is appropriate, so job security and fair labour practices come into play.

The **Telkom Touch** programme stipulates that leave duration according to Exceptional Leave is viewed considering the human aspect of the world it operates in. This part of being a flexible and responsive employer, Telkom does not specify the length of Exceptional Leave employees are entitled to in each situation of a family emergency. An employee's statutory right is to unpaid leave, of short duration, in the event of family emergencies. In terms of notification, an employee needs to give notice as soon as practical reasons for being absent from work and the expected duration of being away from work. The **Telkom Touch** programme states that an employee's rights do not include an entitlement to pay; pay during Exceptional Leave is at Telkom's discretion. An employee has the right to take the leave as annual leave, where one has days of annual leave owing. The next section looks at sub-theme 7 which is Family Responsibility Leave.

4.11.3.7. Sub-theme 7: Family Responsibility Leave

The **Telkom Touch** programme provides for Family Responsibility Leave, an official policy at Telkom that grants up to four days a week if employees have been employed for longer than four months. This is in line with the Basic Conditions of Employment Act (BCEA) of 1997. The **Telkom Touch** programme stipulates family reasons for using this provision include: to attend to the temporary care of a sick family member; needs related to the birth of the employee's child, medical or dental appointments for dependent immediate family members; meetings with school authorities; home and family emergencies. The next section looks at sub-theme 8 which is Bereavement Leave.

4.11.3.8. Sub-theme 8: Bereavement Leave

The **Telkom Touch** programme states, in case of death of a close relative, an employee shall be granted Bereavement Leave for four consecutive working days, including non-working days, beginning on the day of death, with no loss of pay. The bereavement policy, unlike Family Responsibility Leave, specifies which relationships are eligible. These are as follows; Close relatives include husband, wife, common-law spouse, child, parent, brother, sister, mother-in-law, father-in-law, son-in-law, daughter-in-law, grandparent, grandchild, and other relatives

living in the household of the employee. The next section looks at sub-theme 9 which is Educational Leave.

4.11.3.9. Sub-theme 9: Educational Leave

Given the fast-paced changes in the information communication and technology field, a need to stay abreast of skills improvement is necessary. So, Telkom has the Educational Leave initiative, which offers paid time off for employees to prepare for and write the final examination for an approved course of study. The use of this initiative affords employees who are attending school while working with Telkom may take a short time off from their jobs to focus on their schoolwork without suffering financially. Like Family Responsibility Leave and Bereavement Leave, this is a time-based initiative offering a small number of days off work. Notably, this is the only education-specific work-life balance initiative offered at Telkom. This is not possible; arrangements should be set to cause as little disruption to work as possible. The next section looks at sub-theme 10 which is Medical, Dental, and Related Leave.

4.11.3.10. Sub-theme 10: Medical, Dental, and Related Leave

Telkom employees may also require time to attend to their medical needs and so Medical, Dental, and Related Leave is in place. The Telkom Touch programme states that planned doctor, dental or optical appointments should be arranged outside working hours.

Telkom employees are eligible to take time off to deal with the death of a dependent, deal with a dependent who is gravely ill, in a case where a dependent is having a baby, making longer-term arrangements for dependents who are gravely sick. Employees can also take time off to deal with an unexpected disruption or breakdown of care arrangements for a dependent.

The ***Telkom Touch*** manual (2018) defines a dependent as employee's: parent, wife, husband, or partner, child and someone who lives as part of the family, for whom the employee is the primary caregiver.

The ***Telkom Touch*** manual (2018) also states who is not an employee's dependent by saying that a dependent does not include tenants or boarders living in the family home or someone who lives in the household as an employee, such as a live-in housekeeper. Having identified what category of people not included as dependents according to the ***Telkom Touch*** manual (2018), a Telkom employee cannot take leave to take care of the above-identified persons as they do not fall under the category of dependents.

This concludes the section on Theme 3: Work and leave arrangements at Telkom and its related sub-themes and the section on the thematic analysis of programmes and policies collected from the organisation on work-life.

4.12. Conclusion

This chapter presented an overview of the current literature associated with the phenomenon of work-life balance and the document analysis of the Telkom work-life balance policy and the programme as part of Stage 1. The high number of women in the South African labour force is partly due to the legislation promulgated to encourage women entry into ordinary professions and traditionally male-dominated careers like Information and Communications Technology. Although this is a good thing, a lot still needs to be addressed in terms of how women can balance their various life roles in conjunction with such professions' demands.

The following chapter (chapter 5) presents the methodology applied for the generation of the empirical data for this study, in other words, from whom and how the data was collected; the instruments utilised to generate and record this data, and the techniques applied to analyse the raw data generated into usable information, to test the research questions formulated for this study.

Chapter 5

Research methodology

5.1. Introduction

This chapter aims to outline the research methodology of this study. The previous chapters covered the conceptualisation and theoretical aspects of the study. This chapter also focuses on the research methodology used in obtaining the data. The chapter includes the aims and objectives of the study, research design, sampling selection procedure and description, and the research instruments used.

5.2. Research problem

According to Balamurugan and Sreeleka (2020), work-life balance is a major issue in employment as it has implications for one's career and family life.

By increasing their responsibilities as parents, changing dynamics, and changing organisational structures, women in male-dominated fields are facing greater challenges than ever in balancing work-life balance. The ever-changing demands of the work environment of female ICT professionals can directly affect their personal lives, which in turn can make it difficult for them to manage household responsibilities and meet work expectations.

As a result, the study examined women working in the field of Information and Communication Technology in South Africa. The study is aimed at contributing to existing literature by answering the question:

“What are the experiences of women ICT professionals regarding work-life balance?”

The challenges and experiences of South African female ICT professionals working in the Information and Communications Technology profession, their ability to strike a balance between private life and work life, is central to the problem in this current study. The aim of the study is to create insights into the different aspects of their work-life balance and develop a work life model especially designed to assist female ICT professionals to successfully regulate their various challenges in the male-dominated ICT sector. As a result, the study examined women working in the field of Information and Communication Technology in South Africa. To fill the gap in knowledge about how women experience and perceive their lives in the Information Communication and Technology sector in South Africa, this study adapts and extends the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000).

5.3. Focus of the research

The focus of the study is to examine the unique experiences that full-time female Information and Communications Technology professionals encounter in this male-dominated sector.

The next section looks at the research aims and objectives for the current study.

5.3.1. Research aims

To explore the work-life balance experiences of female ICT professionals, the following aims were identified:

Aim 1: To explore awareness of existing work-life balance programmes in the telecommunications organisation.

Aim 2: To investigate the work-life balance experiences of female ICT professionals in the telecommunications organisation.

Aim 3: To evaluate the experiences of female ICT professionals that inform their decisions to leave or stay with the telecommunications organisation.

Aim 4: To develop a framework designed to assist with different work-life balance challenges within the South African context.

5.3.2. Research objectives

The research objectives below were developed to give a thorough exploration of the aims of this study:

1. To investigate the organisation's features and personal practice through the information from surveys available from the telecommunications company that enable employees to achieve work-life balance at the telecommunications company.
2. To evaluate the extent to which all employees are aware of policies and programmes that are in place that address work-life balance at the telecommunications company.
3. To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company.
4. To determine what personal and work experiences and challenges female ICT professionals are currently facing, which could influence their decision to stay or leave their ICT job the at the telecommunications company.
5. To develop a work-life balance framework to a practical problem on how female ICT professionals balance work and family responsibilities at the telecommunications company.

Table 5.1 shows how the different objectives fit with the different aims.

Table 5. 1: How the different objectives fit with the different aims

	Stage 1 Telkom work-life balance document analysis	Stage 2 Quantitative Study	Stage 3 Qualitative study	Stage 4 Framework formulation
Aim	1	2	3	4
Research objective(s)	1	2 and 3	4	5

5.4. Research design

This study adopts a sequential explanatory design using a mixed-method approach that includes secondary data collection, a self-administered on-line questionnaire and personal interviews. The aim of a research design is to provide a plan for the study, how it will establish the relationships among variables in the study of interest. Sekaran and Bougie (2016: 95) explained that “a research design is an outline for gathering, measurement, and scrutinising data, produced to answer the research question.”

The mixed methods approach involved collecting and integrating both quantitative and qualitative data, then drawing interpretations based on the results (Creswell, 2015). This approach was taken when designing the study because the combined strengths of the results from each type of data provide a more comprehensive understanding of the problem than quantitative or qualitative research alone could provide.

In this current study, an explanatory sequential approach was used, and this is sequence-based and used when qualitative results are to be combined with quantitative results. Explanatory sequential design, also known as explanatory design, is defined by Creswell and Clark (2017) as the process of defining (or defining) two distinct phases of interactions (see Figure 5.1). It starts with the collection and analysis of quantitative data, according to Creswell and Clark (2017). First, quantitative results are collected and analysed, followed by the collection and analysis of qualitative data. It is designed to follow the quantitative results of the study with the qualitative phase.

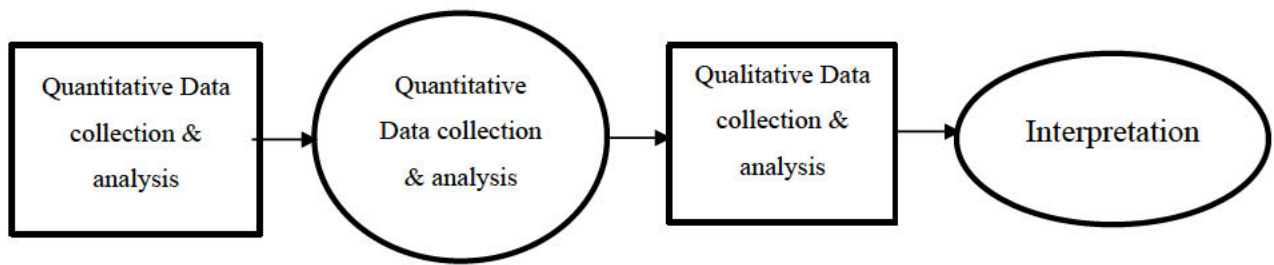


Figure 5. 1: General Diagram of the explanatory sequential design of this study

Source: Adapted from Creswell, Klassen, Plano-Clark & Smith (2011).

The research design for this study needed to lend itself toward the identification, description and exploration of unique experiences that occur within the complex context of Information and Communications Technology, that are shaped by various social aspects encountered by female ICT professionals. The study employed an explanatory sequential mixed methods design. The explanatory design is a two-phased mixed methods design. The study began with a first quantitative phase in which the researcher collected information from 50 participants in the Information and Communications Technology field through an online questionnaire. The researcher interviewed 16 women in the field of Information and Communication Technology in the second phase after taking part in the quantitative phase. This is in line with Creswell and Plano Clark (2011:181) who emphasise that persons who participate in the qualitative phase of an explanatory design must have participated in the first, quantitative phase.

Therefore, in this section, the execution of the research approach, which includes the research paradigm, study site, triangulation and target population of the study, is discussed.

5.4.1. Rational and justification for use of the sequential explanatory design using a mixed-method approach

A sequential design is usually employed to collect quantitative data, followed by qualitative data to explain the quantitative data. This is the technique Martin (2018) describes. The researcher must determine which parts of the quantitative data need to be defined and how these can be explained (and with which sample(s)).

The secondary data from the analysis of documents and data from a questionnaire in the form of quantitative data were used in this study to identify commonalities between results from interviews in the form of qualitative data and those from document analysis. A logical and practical strategy was to carry out the study in sequence. Telkom HR documentation from the

Telkom Touch system and Telkom's policy on working hours: (Other Working Opportunities and Overtime) from 2015 was looked at first. The next step was to distribute a questionnaire, followed by an interview. This simplified the process of collecting data, analyzing it, and assessing it.

By collecting sequential secondary data from documents, quantitative and qualitative data into one study, three different kinds of data were analysed together, which provided greater insight into the research topic than could be gained from analysing and evaluating the data separately.

5.4.2. Research Paradigm

A research paradigm may be referred to as a traditional approach to research, binding academics to specific methods, approaches, assumptions and terminology when conducting research (Grix, 2010). The purpose of any research study can be either exploratory in nature, descriptive, or used to test hypotheses (Saunders, Lewis, & Thornhill, 2009). Many studies can and often do have more than one of these purposes; however, each has different implications on other aspects of research design. In this study, the researcher used the pragmatism paradigm. Saunders (2012) explained that pragmatism allows for a focus on practical applied research integrating different perspectives to understand the data collected.

Using a mixed-methods approach, the study used pragmatism as its philosophy. At Telkom's Pretoria headquarters, it was used to determine the experiences of professional women in the ICT field. This study falls under the practical category since the researcher used a pragmatic approach for the research process, which allowed for more flexibility during the study. Flexibility and triangulation of designs are permissible with pragmatic thinking, which boosts the validity of the research. This is emphasised by the consideration of what works using the qualitative as well as the quantitative approach in answering questions. According to Mpofu (2014), research methods are selected to provide insights into the question as a central focus and independent of any philosophical adherence to alternative paradigms. The pragmatic approach is one of the fundamental guiding principles behind the mixed-method approach adopted for this study, much like the pragmatic approach found in most research paradigms.

This study employed an exploratory design. The next section discusses exploratory studies.

5.4.2.1. Explanatory studies

Creswell and Clark (2017) states that, there are two distinct interactive phases in the explanatory sequential design (also known as the explanatory design). Data collection and

analysis are the first steps in this design. First, quantitative results are collected and analysed, followed by the collection and analysis of qualitative data. After the quantitative phase, a qualitative phase is followed.

Eckert (2013) explained that, to gain a greater understanding of the chain of evidence that links phenomena, a mixed method sequential explanatory study, which involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data would yield the desired results.

In this study, a quantitative research phase was used to establish links between the evidence chain in this study. In contrast, the qualitative phase brought nuance, context, and understanding to each link in the chain. Exploratory research is justified for this study since work-life balance experiences of female ICT professionals are an existing phenomenon, hence the need to gain familiarity and obtain new insights into their experiences, so as to identify a more accurate description or explanation of the problem.

This study qualifies to be explanatory because there are several aspects to consider if the intent of an explanatory design best fits a particular study, according to Cresswell and Clark (2017). In this study, Cresswell and Clark's (2017) notions were used to ascertain their usefulness.

This research is explanatory in nature as it undertakes to study a relatively under-explored phenomenon in South African Information Communications and Technology, namely work-life balance experiences of female professionals. An exploratory type of study provides new insights into this phenomenon of female ICT professionals.

5.4.2.2. Case study research

Women working in ICT at Telkom's Pretoria head office were surveyed for this exploratory study. This research used a case study research design for its assessment of female ICT professionals at Telkom. Telkom was used as because, although Telkom is no longer South Africa's landline monopoly, having lost out to a second Fixed Network Operator Licensee competitor Neotel and the three other mobile operators, Vodacom, MTN, and Cell-C, Telkom still has the country's most extensive telecommunications infrastructure, although in the past it opted for regulatory intervention on competition by the government. Research can be described as descriptive when it seeks to accurately describe the characteristics of a particular group or situation. Zucker (2009) stated that using a case study design was especially valuable for the researcher if aiming to develop a deeper comprehension of the background of the study and the procedures concerned, thus it was particularly useful in exploratory and explanatory research. Yin (2013) affirmed that a case study involves in-depth research of an individual unit, or group to create understanding of a social phenomenon. Furthermore, according to Yin (2014)

and Stake (1995), a case may be an individual, an organisation, or an activity that is bounded by certain criteria. Creswell and Clark (2017), the intent of a mixed methods case study design is to develop an enhanced description and analysis of a case or multiple cases through the use of both quantitative and qualitative data. The case or cases of interest are often identified by the researcher at the start of the study.

This study qualifies as a case study given the definition by Yin (2014), Stake (1995) as well as Creswell and Clark (2017). This study is unique in that it only relates to females and is set at Telkom Headquarters in Pretoria. This study only represented a small sample of female ICT professionals; and therefore, the findings could not be generalised as applicable on other females in the telecommunications industry in South Africa and is a case study of Telkom. The participants in the qualitative and quantitative phases of the study were female ICT professionals from the telecommunications industry, and those results could not be generalised to other industry sectors.

The next section describes triangulation as a mixed methods approach that was used in this study.

5.4.3. Triangulation

As stated earlier, this study adopted a mixed research method (an amalgam of qualitative and quantitative research methods), for easy triangulation. Triangulation is defined as “the use of more than one method or source of data in the study of social phenomenon so that findings may be cross-checked” (Bryman, 2012: 717). Triangulation is defined as the use of either qualitative or quantitative, or both in studying the same phenomenon for increased study credibility. This implies that triangulation is the combination of two or more methodological approaches, theoretical perspectives, data sources, investigators and analysis methods to study the same phenomenon. Triangulation is also a tool that can be used to prove reliability and validity by using the same methods as other researchers to produce similar results (Brannen, 2017). Mixed methods as a research approach are based on pragmatism. The theory of pragmatism does not lend itself to a single philosophy but allows the researcher to choose either quantitative or qualitative techniques to gain deeper insights into the research topic at hand (Maharaj, 2014). Yeasmin and Rahman (2012) argued that the use of a single methodology is limiting and presents a gap in research methods. The use of multiple perspectives is required to overcome this deficiency of a singular approach.

The fundamental principle of a mixed methods approach is to combine the quantitative and qualitative data to produce a set of data that maximises complementary strengths, and minimises non-overlapping weaknesses (Creswell, 2013; Tashakkori & Teddlie, 2012). Noble and Smith (2015) noted that, strategies to ensure the credibility of the study's findings included: (a) Accounting for personal biases, and in this study, this was overcome by the precision in which the findings accurately reflected the data. The study also utilised consistent analytical procedures, including accounting for personal and research method biases that may have influenced the findings.

(b) Keeping careful records throughout the study by owning and using reflective research journals avoiding the messiness of the research process visible to the researcher who made it visible for those who read the research and thus avoid producing, reproducing, and circulating the research discourse as a neat and linear process.

(c) Employing methodological triangulation by using more than one method of obtaining data; and

(d) Inviting participants to review and verify the final interview transcripts, for respondents' validation. This was done by giving the final report and its interpretations to a number of respondents, for confirmation that the transcripts held a true representation of their work, and by checking for their comments. Thus, the researcher was able to ascertain authenticity of the report.

Abiola (2013) identified four (4) typologies of triangulation:

(a) *Investigator triangulation*: According to Bryman (2008), investigator triangulation was employed where multiple researchers were used for gathering and interpreting data for a research activity. In other words, it referred to one research activity with many researchers.

(b) *Data triangulation*: Bryman (2008) defined data triangulation as a process of collecting the required data for research using multiple sampling strategies. This study employed data triangulation by collecting information from three different sources, namely, archival data from the Telkom Human Resource Information Systems (HRIS) in terms of the usage of work-life balance programme of the virtual assistance programme of **Telkom Touch**, and the Telkom policy document that is, the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 as well as quantitative and qualitative data from personnel at Telkom.

Since this study utilised a mixed-methods approach, there was a quantitative and a qualitative aspect to it. The quantitative aspect of the study employed a probability method in the form of simple random sampling of 50 female ICT employees from a total population of 57 which was

logically homogenous (female). To make statistical inferences about a population, simple random sampling is used. To ensure high internal validity, randomisation is the best way to reduce the influence of confounding variables. The large sample of 50 participants from 57 participants gives a simple random sample high external validity since it represents the characteristics of the larger population. A non-probability sampling strategy was employed in the qualitative aspect of the study, which incorporated purposive sampling to choose participants most likely to satisfy its research aims and objectives.

Due to time constraints, accessing the female ICT professionals was challenging during the qualitative data collection stage. Because of this, convenience sampling was used. As can be seen from the online questionnaire at the end of the report, participants are asked to indicate when they can participate in interviews. The sample is selected based on availability and not on more elaborate screening processes. Initially, twenty-five (25) participants showed interest in taking part in individual interviews. However, only sixteen (16) of them participated in the face-to-face portion of the interview.

(c) *Theory triangulation*: Bryman (2008) asserted that triangulation entailed the adoption and adaptation of multiple theories. Extensive literature reviews in different disciplines in work-life balance, Telecommunications, and Information Telecommunications and Communications. Two theoretical bases of the Life Course (LC) Perspective (Giele & Elder, 1998) and Border Theory (Clark, 2000) were brought together in a multidisciplinary study. This was achieved through the convergence of information from different sources by the examination of the work-life balance phenomenon, the Life Course (LC) Perspective (Giele & Elder, 1998), and Border Theory (Clark, 2000) and telecommunications and information, telecommunications and communications.

(d) *Methodological triangulation*: Methodological triangulation was employed when the researcher made use of more than one research method for academic investigation (Bryman, 2008). This study employed a mixed methods approach (qualitative and quantitative) for analysis purposes. Firstly, data was collected from archival databases, like the Telkom HRIS and policy documents on work-life balance, that is, Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015; secondly, using a questionnaire, information was collected from the sample of female ICT professionals selected for the study; and, thirdly, interviews were used to collect information from female ICT professionals as well as senior officials at Telkom.

Figure 5.2 illustrates the interactions between the types of triangulation used in this study.

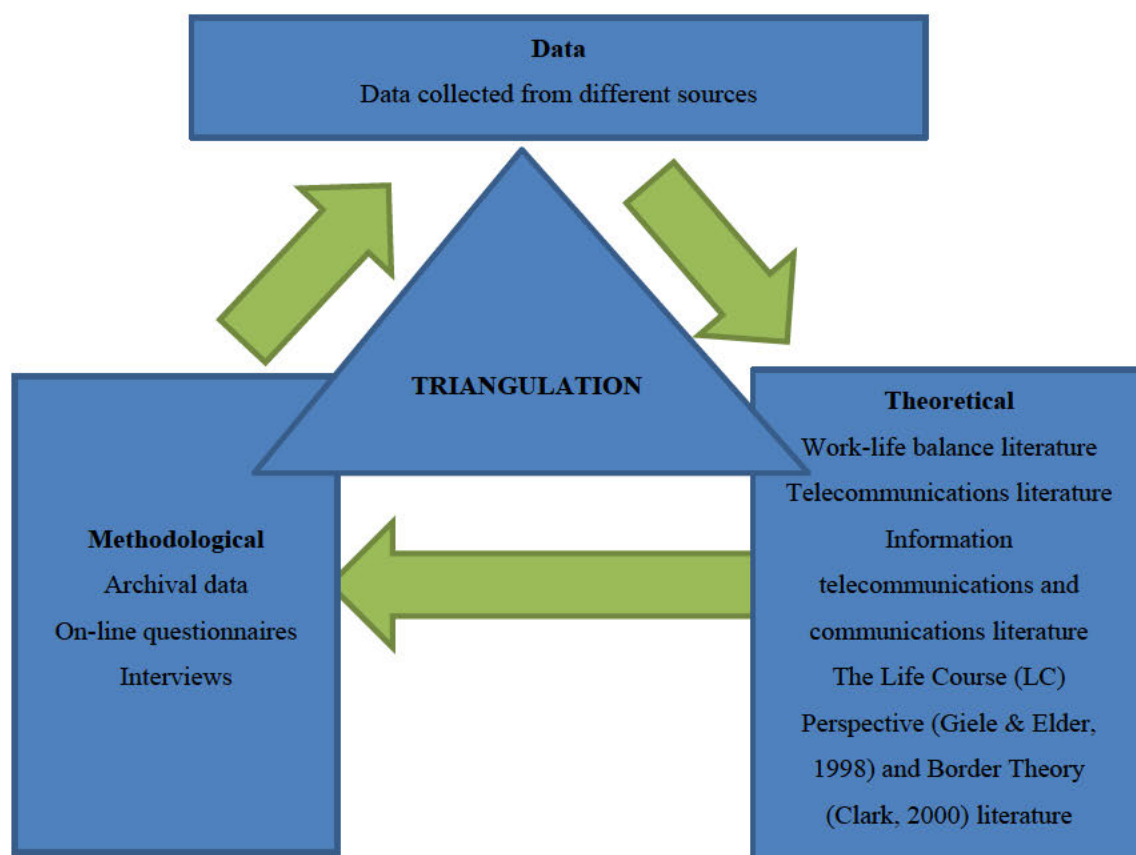


Figure 5. 2: Types of Triangulation used in the research design of this study

5.4.4. Study site

The selected organisation for this study was Telkom Head Office situated in Pretoria. Telkom was formed from the then Department of Post and Telecommunications. In 1991, Telkom SA and the SA Post Head office were merged into one company. This choice was made looking at MyBroadband (2018); it is reported that Telkom has been the foundation of South African communications for more than 140 years, and it has built an unsurpassed footprint of copper, fibre, and wireless technologies in the country. MyBroadband (2018) also reported that Telkom provided opportunities for women, blacks, and people living with disabilities.

The purpose of choosing Telkom Head Office was based on the fact that the office provided the researcher with a relatively higher number of female ICT professionals. Telkom satellite offices were deemed inappropriate for this study, as most of them had fewer or no female ICT professionals at all. Therefore, to simplify the process, Telkom Head Office in Pretoria was the primary choice. For satellite offices that had a few females, the process of obtaining permission from managing personnel in the different office locations would have also proved to be an arduous process, as some satellite offices still needed approval from the headquarters in Pretoria, as the researcher found out.

5.4.5. Target population

Deanscobme (2017) described a target research population as all the people who are likely to agree to participate in the research by providing the required valuable data. Sekaran and Bougie (2016) stated that the target population had to be described in terms of the elements, geographical borders, and time. There were 322 women at Telkom Headquarters in Pretoria, occupying different jobs, such as top management, middle management, junior management, administration, project management, financial services, but the study focus was on the ICT section, comprised of a population of fifty-seven (57) female ICT professionals. This study's emphasis was on Information Communications and Technology female employees, and the target population was spread among three sections of the Information Communications and Technology department. The selection process was determined by the number of available employees in each of the three sections of the ICT department. Table 5.2 depicts the total number of full-time employees of females and males with different job descriptions at Telkom Pretoria Headquarters as of October 2018.

Table 5. 2: Population distribution at Telkom Pretoria Headquarters of full-time employees as of October 2018

INFORMATION AND COMMUNICATIONS TECHNOLOGY DEPARTMENT	CLASSIFICATIONS OF JOBS	POPULATION	SAMPLE
Information and Communications Technology	Operations Specialists	11	10
	Senior Data Management Managers	6	5
Information Technology	Junior ICT Technicians	7	5
	Systems Technicians	11	10
Auxiliary services	ICT Technicians	11	10
	Data Base Network Administrators	11	10
	TOTAL	57	50

Source: Telkom Human Resource Information Systems Department, 2018

5.4.6. An overview of the Research methodology

This study employed a case study research design using a sequential mixed methodology, including secondary data collection, a self-designed online questionnaire, and personal interviews (see Figure 5.2 for a graphic representation of this).

A sequential cross-sectional research approach was used for this study. A sequential mixed-methods procedure was adopted for the study. This was done to allow the researcher to enhance one methodology's findings with another (Creswell, 2009).

The stages followed in this research were:

- Stage 1: The present study commenced with data retrieval through the Telkom Human Resource Information System (HRIS) to explore of policies and programmes that are in place that address work-life balance at Telkom. This was done statistical analysis regarding the employees' utilisation of the Telkom policy and programme. This aspect made up stage 1 of the study. This was followed by a quantitative method which entailed the development of the **GoogleTM Drive Forms** questions.
- Stage 2: Stage 2 was a quantitative method, entailing the development and administration of the **GoogleTM Drive Forms** questions which resulted in "*The Work-Life Balance Study Employee On-Line Survey.*" The quantitative data was then analysed using the Statistical Package for Social Sciences (SPSS) version 26.
- Stage 3: A qualitative method that initially elicited rich, in-depth data on various work-life balance issues being experienced by female ICT employees in the Telecommunications sector was conducted. The researcher initially conducted a quantitative research of female ICT employees, then analysed the results, and then built on the results to explain them in more detail with qualitative research. The study is considered explanatory because the initial quantitative data results re explained further with the qualitative data. This was considered sequential because the qualitative stage followed the initial quantitative stage, thus making this stage 3 of the study.
- Stage 4: Lastly, as part of stage 4, the data was interpreted to establish meaning to female ICT professionals' experiences. The data obtained was used to develop a work-life balance framework and achieve research objective 6. The sequential mixed-methods procedure employed for this study, illustrated in Figure 5.3, is described in detail in the next section of this chapter.

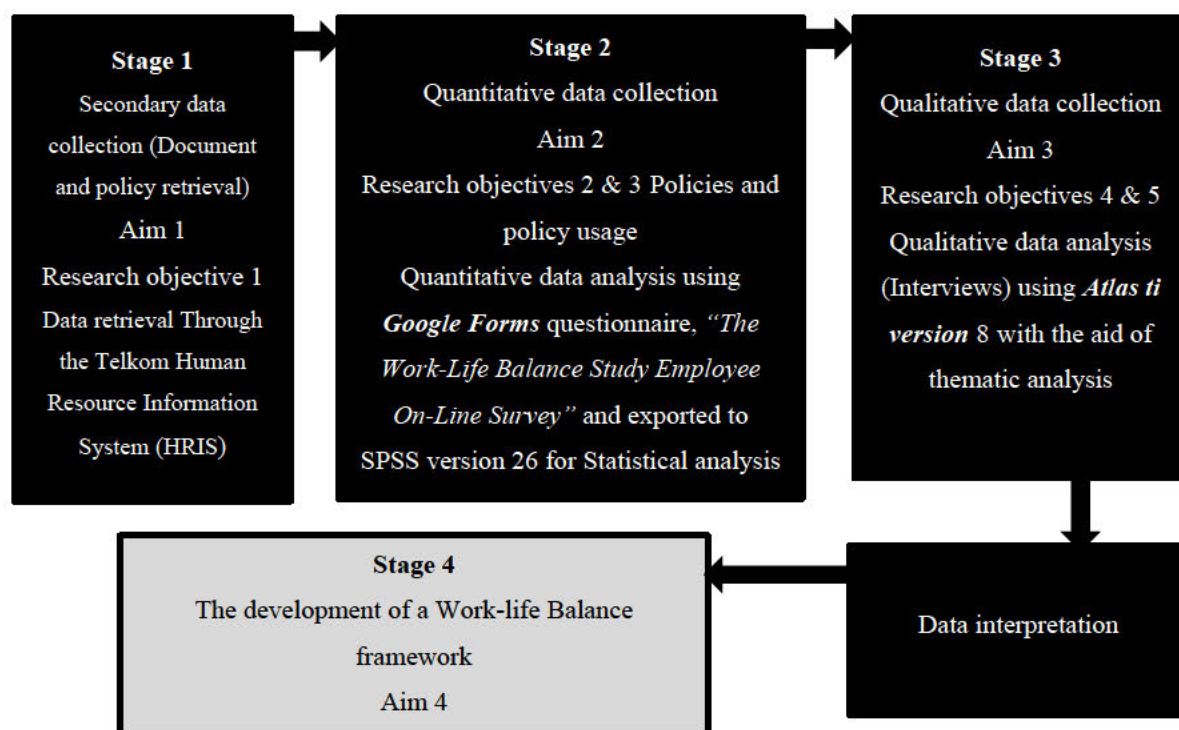


Figure 5. 3: The mixed methods research methodology adopted for the study

5.5. Stage 1: Secondary data collection

According to Maharaj (2014), secondary data are those which have already been collected by someone other than the researcher.

Stage 1 covered aim 1 of the study. A collection of vital information from the organisation was obtained. The number of employees in the organisation as a form of secondary data was obtained and this was done with the permission the Human Resource Information System (HRIS) run by the ICT Department of Telkom. Information aimed at looking at the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) (2015) and the work-life balance programme known as *Telkom Touch* that are in place that address work-life balance at Telkom and to assess the features of the organisation and personal practice that enable employees to achieve work-life balance at the telecommunications company also served as a form of secondary data. Olabod, Olateju and Bakare (2019) however, report that secondary data has its own shortcomings. Secondary data may be outdated, inaccurate or have validity issues. It may not be relevant to the population under examination, or detail enough. For example, an administrative data, transactional data or data from the Internet, which is not originally collected for research, may not be available in the usual 'research formats' or may

be difficult to get access to. This exposes researchers to possible errors that can affect the quality (reliability and validity) of the data and invariably affects the viability of the research. To ensure reliability and validity of the collected secondary data, the official verified statistics collected by the Telkom HRIS, the organisation’s database for statistical information regarding work-life balance and other human resource metrics was approached concerning the work-life balance activities of the permanent employees at Telkom. Unfortunately, the statistics for 2019 were not available from HRIS at the time of submission of the final documents for the study so the statistics for 2018 were utilised. Descriptive and inferential statistics were used to analyse the documents collected. This is illustrated in Figure 5.4.

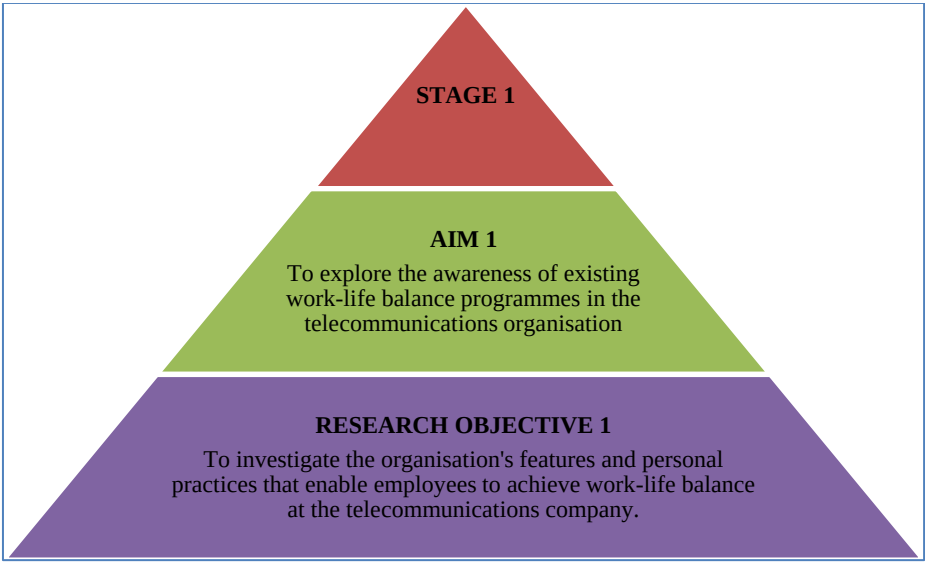


Figure 5. 4: Research design of Stage 1 of the study

In the next section, Stage 2 which is the quantitative study is described.

5.6. Stage 2: Quantitative study

This research study involved a quantitative as well as a qualitative methodology. In stage 2, 57 online survey questionnaires were sent out, but only 50 of those online survey questionnaires were correctly filled and returned. An on-line survey, “*The Work-Life Balance Study Employee On-Line Survey*” was designed as a tool to use at the end, participants interested in an individual interview could indicate their willingness to further participate in the research. At the end of the online survey, as participants were asked about their willingness to participate in the study’s further individual interview stage, twenty-five (25) participants initially indicated their interest but, in the end, only sixteen (16) participants took part in the final face-to-face interviews, as they were the only ones who availed themselves for the individual interviews, as the others were unable to due to time constraints.

The next section discusses the details relating to the quantitative approach in the following section.

5.6.1. Sample and sampling technique

In this section, the sample and sampling techniques used in Stage 2 of the study are described.

5.6.2. Sample and sampling techniques in the quantitative stage

It is not always possible to study a whole population; therefore, the researcher selected a big enough sample to represent the population. Gentles, Charles, Ploeg, and McKibben (2015) stated that sampling was the technique of selecting a subset from the whole population to represent characteristics of the entire population.

The Raosoft sample calculator was used to determine the appropriate sample (Raosoft, 2004) from a total of number of 57 female ICT professionals, and sample size of $n = 50$ was drawn from the population, calculated at 95% confidence level, under the assumption of a 50% response rate. There was a total of 57 females in the Information Communications and Technology Department at Telkom Headquarters, and therefore a higher number could not be obtained. During the data collection phase, the researcher had to send constant reminders to participants to answer the on-line survey, "*The Work-Life Balance Study Employee On-Line Survey.*" The Information and Communications Technology department was spread across three sections: The Information and Communication Technology section, the Information Technology section, and the Information and Communication Technology auxiliary services (Refer to Table 5.2).

Stage 2 covered aim 2 of the study and study objectives 2 and 3. The primary data was collected by an online survey administered on the Google Forms platform, "*The Work-Life Balance Study Employee On-Line Survey.*" Descriptive analysis and inferential statistics were performed on the primary data obtained. The purpose of performing descriptive analysis, involving frequencies on the data gathered, was to explore which demographic and academic variables characterised the sample. The structured questionnaire contained a 5-point Likert scale with the following ratings: 1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never). Responses were submitted and catalogued electronically before being statistically analysed by **Google™ Drive Forms** software.

5.6.3. Purposive sampling

Purposive sampling was used for this study, which, according to David and Sutton (2011), requires that the sampling population be selected based on the researcher's knowledge. The researcher selected participants based on their professional knowledge in the three ICT departments, namely, the Information and Communications Technology, Information Technology, and Auxiliary services.

Participants selected included Operations Specialists, Senior Data Management Managers, Junior ICT Technicians, Systems Technicians, ICT Technicians, and Data Base Network Administrators (Refer to Table 5.2).

5.6.4. Data collection method: Design of the questionnaire

In Stage 2 of the study, to achieve research aim 2 of the study (see Figure 5.4); a self-designed online questionnaire was devised, consisting of questions covering:

- Evaluation of the extent to which all employees were aware of existing policies and programmes that addressed work-life balance at the telecommunications company (Research objective 2)
- Assessment of challenges female ICT professionals faced in combining work and family life at the telecommunications company (Research objective 3).

A self-designed survey called "*The Work-Life Balance Study Employee On-Line Survey*" (Refer to Appendix D) was created to achieve the research's quantitative aspect. As a result of the online survey configuration, no incomplete surveys were submitted by respondents, and therefore the forms handed in were all complete. Data was collected online using E-mails to participate in the survey through **Google DriveTM Forms**, and the following link was provided: https://docs.google.com/forms/d/e/1FAIpQLScdUr0ZS2BysCPWDAJSXtb9rpwzTMRKsVTkCgVOqz-TFpKIQ/viewform?usp=sf_link) to the survey, using a covering e-mail and research invitation letter, containing contact information of the researcher. The respondents then simply followed the link, completed the questionnaire online, which was then automatically recorded for the specific study. At the end of the survey, there was an option requesting whether the participant would be interested in participating in a semi-structured interview, discuss in more detail work-life balance, their experiences, and other areas of interest. Figure 5.5., shows Stage 2 of the study.

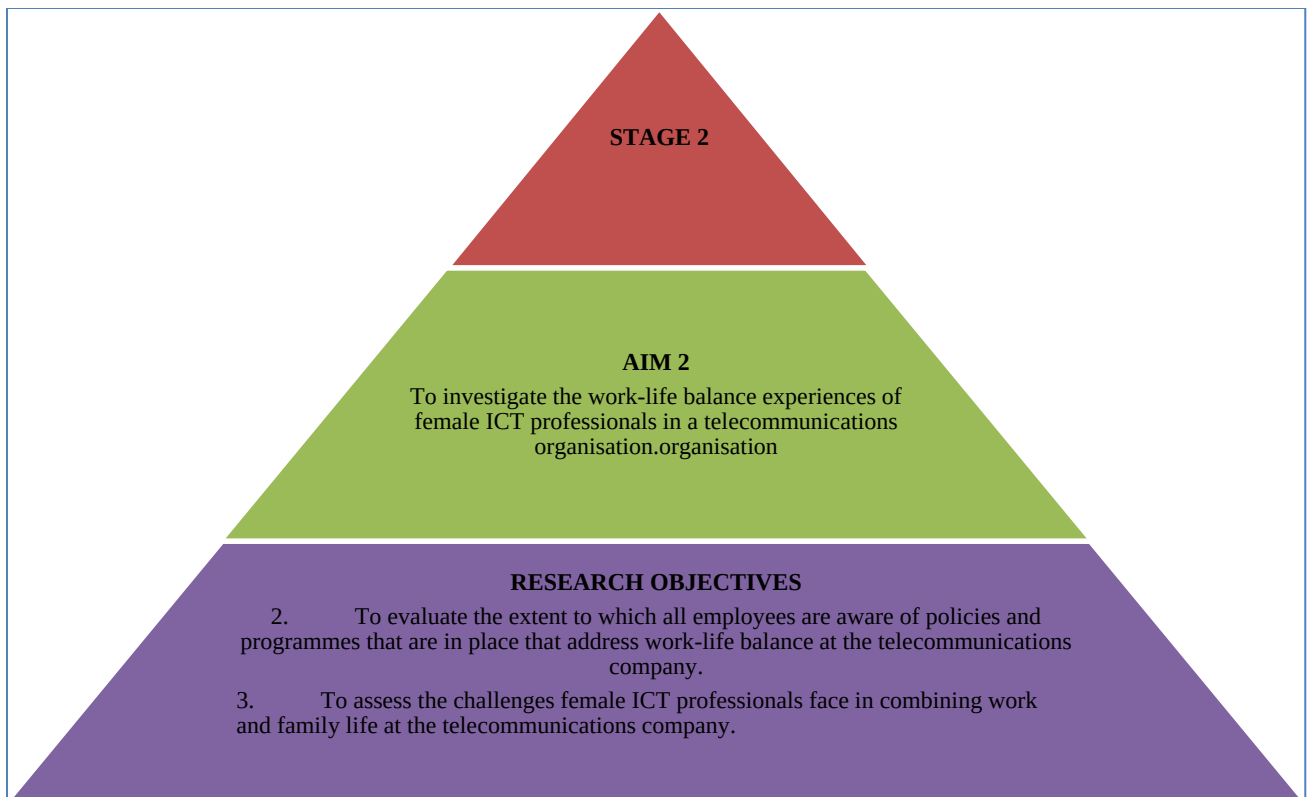


Figure 5. 5: Research design of Stage 2 of the study

The self-administered questionnaire called “*The Work-Life Balance Study Employee On-Line Survey*”. Using the web-based questionnaire, non-response errors were eliminated as the researcher marked all the statements and questions as ‘required.’

This requirement served to ensure that the respondents answered all the statements and questions in every section, as the instruction indicated that the first section had to be completed before the respondents could continue, to complete the following section (Wiid & Diggins, 2015).

The on-line survey, “*The Work-Life Balance Study Employee On-Line Survey*” comprised three sections. The questionnaire was constructed in the process depicted in figure 5.5. Within this study, the researcher used the element of conducting data as online (electronic) questionnaires. According to Malhotra (2010), there were several things that researchers had to consider in order to create a good questionnaire. To begin with, the researchers had to be specific about the information they wanted to gather. In this regard, the researcher in this study made a point of being well-equipped with knowledge of what was needed from respondents. Furthermore, the researcher gave special consideration to the characteristics of the chosen sample to make the questionnaire clearer.

The researcher designed the questionnaire (Refer to Appendix D) that consisted of sections A, B and C. The process followed is indicated in the next section.

Section A consisted of the demographic information of the respondents, broken down into categories which included age group, racial grouping, position, highest qualifications. This section of the questionnaire consisted of 9 questions, which were classified according to nominal scales.

Table 5. 3: Section A: Demographic factors in questionnaire

	Demographic factors
1.	Age group
2.	Racial Grouping
3.	Position
4.	Highest qualification
5.	Marital Status
6.	Number of years worked in the organisation
7.	Partner/ spouse’s employment status if any
8.	Hours spent on work-related issues per week
9.	hours per week spent physically at work

The on-line survey, “*The Work-Life Balance Study Employee On-Line Survey*” consisted of work and life-related questions based on the literature review.

Section B consisted of 8 questions which were divided into the following aspects:

Work-life balance (3 questions); Gender stereotypes (2 questions) and Flexibility (2 questions) (see Table 5.3).

The structured questionnaire contained primarily a 5-point ordinal likert scale with the following ratings: 1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never).

Section C consisted of 12 questions divided into the following aspects:

Dependent adults/children-related tasks (2 questions); Work/home interference (3 questions); Flexibility/ time management (3 questions); Sense of accomplishment (2 questions) and Skills acquisition (2 questions) (see Table 5.5).

These were rated using an ordinal scale, from Always (1) to Never (5). Ordinal scales describe order, and that’s the key to remember with ‘ordinal scales’ –it is the order that matters.

Table 5. 4: Section B and C questions of “The Work-Life Balance Study Employee On-line Survey”

Section	B (Work-related)	Questions
Aspect	Work-life balance	1.1/1.2/1.3/1.4.
	Gender stereotypes	1.5/1.6.
	Flexibility	1.7/1.8.
Section	C (Life-related)	
Aspect	Dependent adults /children-related tasks	2.1/2.2.
	Work/home interference	2.3/2.4/2.5.
	Flexibility/ time management	2.6/2.7/2.8.
	Sense of accomplishment	2.9/2.10.
	Skills acquisition	2.11/2.12.

5.6.4.1. Pilot study

Pilot testing is a small-scale trial run of a particular component, and researchers frequently conduct these to refine the methodology (Burns & Grove, 2011). For Dikko (2016) and Turner (2010), noted that such instrument refinement activities, and the pilot test, were fundamental to ensure validity in any research.

Therefore, a group session with 8 participants was used as a source of data validation. The 8 participants matched the criteria of the population, all being professional female ICT professionals. The 8 participants were as follows: one Operations Specialist, two Senior Data Management Managers, two Junior ICT Technicians, one Systems Technician, one ICT Technician, and one Database Network Administrator. The purpose was to examine the pragmatism of the proposed method, uncover possible shortcomings in the measurement procedures, or interpretation of questions, and make the required changes before the actual study. It was vital that the questionnaire look proficient in the instructions, and unambiguous (Refer to Chapter 7, Section 7.4.3).

5.6.4.2. Review of Assessment instrument by experts in the field

As part of the design process, the draft questionnaire was circulated to 5 experts in research methodology from the University of Venda, and Nelson Mandela University, to ascertain that the questions characterised the problems they intended to address and apprise authorities in the field of research methodology. Their recommendations for changes to the questionnaire are presented in the next section. The design process involved circulating the survey to experts and

colleagues in research methodology at the University of Venda and Nelson Mandela University. The following suggestions for improvements were made:

- Structure the questions concisely to avoid confusion. Some questions asked two or three things at once.
- Pre-code the questions before analysis as this would save you time later. This makes the analysis process easier as the researcher will know where each question falls under.
- The term ‘questionnaire’ should be replaced with ‘survey.’
- Remove item number 3: What department are you in? as this is already covered in the demographics section.
- Remove item number 4: What is your job title? Rather create a separate table so that the section is not too cluttered.
- Remove item number 5: What location do you work at? This is already established as the City of Pretoria.

The next section looks at the number of scale points on Likert scale items of the “*Work-Life Balance Study Employee Survey*.”

5.6.4.3. Number of scale points on Likert scale items

According to Warmbrod (2014:31), “the Likert scale is effective in the generation of composite scores of individual responses to multiple items based on generic responses.”

For the present study, the Likert scale was categorised as follows: 1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never) for Sections B and C. Sections B and C probed work and life-related aspects of female ICT professionals.

The work-related section addressed work-related aspects of female ICT work lives. This section used a five-point Likert scale to elicit responses from respondents. This was because respondents were given pre-categorised responses, thus were offered less options of responses on how they felt about their work lives. In the next section, questions dealt with life-related questions, and how the respondents related to them. A five-point Likert scale was also used here to provide a mid-point option for the respondents, so that they did not end up forced toward agreeing or disagreeing with questions, by choosing from two extremely opposite options, that is, 1=Always or 5=Never.

The work-related section dealt with work-related aspects of female ICT work lives. This section used a five-point Likert scale to elicit responses from respondents. This was because respondents were given pre-categorised responses and thus needed less variety in terms of choice of responses, to how they felt about their work lives. In the next section, questions dealt

with life-related questions, and how the respondents related to them. A five-point Likert scale was also used here to provide a mid-point option for the respondents, so that they were not forced towards agreeing or disagreeing with questions by choosing from two extremely opposite options, that is, 1=Always or 5=Never.

5.6.4.4. The “work-related” and “life-related” scales of “The Work-Life Balance Study Employee On-Line Survey”

Section B consisted of questions with 8 items as they related to work. Table 5.5 depicts the “work-related” section of “*The Work-Life Balance Study Employee On-Line Survey.*” Section C consisted of questions with 12 items as they related to life.

Table 5. 5: The “work-related” and “life-related” scales

“Life-related”	
	Questions
Dependent adults /children-related tasks	2.1-2.2
Work/home interference	2.3-2.5
Time management	2.6-2.8
Sense of accomplishment	2.9-2.10
Skills acquisition	2.11-2.12
“Work-related”	
	Questions
Work-life balance	1.1-1.4
Gender stereotypes	1.5-1.6
Flexibility	1.7-1.8

The reliability of the “work-related” and “life-related” scales is discussed in the following section.

5.6.4.4.1. Reliability of the “work-related” and “life-related” scales

Sekaran and Bougie (2016: 223) stated that “the reliability of a measure was an indication of the stability and consistency, with which the instrument measured the concept in order to give the best assessment of the ‘goodness’ of a measure.” Reliability is achieved using Cronbach’s alpha, which is a reliability coefficient and indicates how well items are arranged and a positive correlation (Sekaran & Bougie, 2016). A reliability coefficient of 0.60 or higher is considered acceptable for a newly developed construct.

Cronbach’s alpha coefficients were calculated to determine the reliability and inter-item consistency of this study (Kline, 2016). Basic guidelines were suggested by George and Mallery (2003) with regards to the significance of alpha values (α) in Table 5.6.

Table 5. 6: Cronbach’s alpha values categorisation

Cronbach’s alpha (α) after deletion	Characterisation
$\alpha > 0.9$	Excellent
$\alpha > 0.8$	Good
$\alpha > 0.7$	Acceptable
$\alpha > 0.6$	Satisfactory
$\alpha > 0.5$	Poor
$\alpha < 0.5$	Unacceptable

(Source: Adapted from George & Mallery, 2003:231)

In line with the categorisations of the Cronbach’s alpha coefficients presented by George and Mallery (2003:231), $\alpha > 0.7$ was deemed to be acceptable reliability for this study. While Hair et al. (2006) suggested a lower limit of 0.70, however they did advise that a lower limit of 0.60 could be deemed acceptable for exploratory studies. For this study, a lower limit α after deletion > 0.7 was employed. The following section discusses the other measures employed to ensure reliability.

The following measures were taken by the researcher to ensure reliability:

- The researcher ensured that the design of the questionnaire was clear and explicit to ensure responses to all questions.
- The Cronbach’s Alpha test was employed to calculate inter-item consistency, with a cut-off point of 0.7 being regarded as reliable.
- Additionally, since the online survey was administered to respondents meeting specific criteria, that is, female ICT professionals, the reliability of the study was enhanced (Fricker, 2008; Vehovar & Manfreda, 2008).

5.6.4.4.2. Validity of the “work-related” and “life-related” scales

Rigor is an essential aspect of quantitative research, and the quality of the study is enhanced by the researcher’s validity and reliability measures (Heale & Twycross, 2015). The measurement of instrument validity, in other words, the extent and accuracy to which a concept is measured by the study (Heale & Twycross, 2015), was concerned with establishing whether

the study instrument accurately measured what the researcher intended (Verboord, 2013). The literature (Heale & Twycross, 2015; Khalid et al., 2012) recognised three salient typologies of validity: content validity, construct validity, and criterion validity. Each validity typology is summarised in Table 5.7.

Table 5. 7: Types of validity

Type of validity	Description
Content	Extent to which a research instrument accurately measures all aspects of a construct.
Criterion	Extent to which a research instrument is related to other instruments that measure the same variables.
Construct	Extent to which a research instrument (tool) measures the intended construct.

Source: Heale & Twycross (2015:66)

As seen in Table 5.7, the validity typologies are mainly concerned with the research instrument and its accuracy, the scope of the construct being measured, and the relationship between the instrument and other related instruments measuring the same variables. To secure validity, the researcher utilised those types of validities, and in the next section, each typology is discussed briefly.

a) Content validity

Khalid et al. (2012:23) highlighted that “content validity focused on whether the items of the instrument measured the construct adequately.” Content validity was secured by formulating survey questions based on the literature review, and review of previous studies. In addition, Heale and Twycross (2015:66) examined the aspect of face validity “as a subset of content validity. Face validity may be described as the questionnaire’s subjective elements, such as format, cover letter, and associated materials, that influence the respondent’s decision to complete the survey.”

In this study, face validity was secured as the researcher conducted expert consultation, as part of the draft survey questionnaire’s critical appreciation process. Due to the potential respondents’ profiles, the questionnaire was also piloted (see section 5.6.4.1 under the Pilot study). The researcher opted for expert consultations, with seasoned researchers (Professors within the fields of Human Resource Management, and experts in the field of research methodology, experts from the University of Venda and Nelson Mandela University were asked to complete and then review the questionnaire, after which minor word changes were effected to the items.

b) Criterion validity

Criterion validity is sometimes also referred to as predictive validity and implies that an item has observed association with some criterion, with the value being the association (DeVellis, 2012). Criterion validity determines whether an instrument is measuring what it is supposed to measure, and the correlation between the instrument and criterion is an indication thereof (Maree, Creswell, Ebersöhn, Eloff, Ferreira, Ivankova, Jansen, Niewenhuis, Pietersen, Plano-Clark, & Van der Westhuizen, 2007). The notion was recommended by several scholars (Quinlan, Babin, Carr, Griffin, and Zikmund, 2015), thus improving the criterion-related validity of this research study.

c) Construct validity

Verboord (2013:380) assert that “construct validity establishes the degree of relatedness between a measure and other measures, consistent with theoretical hypotheses.”

As the on-line questionnaire used was self-designed, it was important for the researcher to establish the instrument’s construct validity. To ascertain the construct validity of the research instrument, a factor analysis test was conducted. Validity was achieved through factor analysis, which pointed out the items best suited for each dimension. This was done using factor analysis.

Exploratory factor analysis (EFA) is a method of deciding on the number and nature of unobserved latent variables, which can be used to describe the shared variability in a set of observed indicators. According to Preacher, Zhang, Kim, and Mels (2013), EFA is one of the most valuable business research methods. Factor analysis, in general, allows researchers to analyse the structure of relationships (correlations), amongst a large group of variables, by describing sets of variables that are highly interconnected (factors) (Hair et al., 2010).

The test used was the ‘Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy’ and ‘Bartlett’s test of sphericity’ for whether the sample was adequate for factor analysis.

As a general rule, the KMO value had to be .60 or higher to continue with factor analysis (Hair et al., 2010).

‘Principle component analysis’ and ‘Varimax rotation’ were also used to safeguard construct validity. The parametric tests used to determine the self-designed questionnaire’s validity were the KMO and Bartlett’s test, principle component analysis, and Varimax rotation. The results of these tests are presented in Chapter 7, Table 7.7. A brief explanation of these parametric tests is presented next.

- Principal component analysis: Lever, Krzywinski, and Altman (2017) stated that principal component analysis (PCA) simplified the complexity in high-dimensional data, while retaining trends and patterns. By transforming the data into fewer dimensions, which act as summaries of features.
- KMO and Bartlett's test of sphericity: This was a statistical test to determine the presence of correlations among variables. According Yong and Pearce (2013), only dimensions with a Kaiser-Meyer-Olkin measure of sampling adequacy (KMO index) above 0.50 were acceptable.
- MSA (Measure of Sampling Adequacy): The MSA is typically used in conjunction with exploratory factor analysis (EFA). The MSA is a single value used to assess the adequacy of the inter-correlations of a set of variables, and each variable for an EFA. Hair et al. (2010) asserted that to check the appropriateness of factor analysis and measure the degree of inter-correlation among the variables, measure sample adequacy (MSA) test was used.

A researcher can only proceed with factor analysis if the MSA is above .50.

VARIMAX rotation: According to Pallant (2016), the VARIMAX rotation showed the strength of the relationship between two factors, and gave information, on whether it was reasonable to assume that two components were related, or whether it was necessary to use, and report, the Oblimin rotation solution which provided two tables of loadings.

5.6.5. Data Analysis

Maharaj (2014) mentioned four rudimentary scales: Nominal, Ordinal, Interval, and Ratio (see Table 5.8). Toepoel (2016) advanced that Nominal scales were unordered responses that generated data grouped into categorical clusters. Similarly, Khalid et al. (2012) observed that Nominal scales were aligned with identifying and categorising groups and data.

Nominal scales were mostly utilised in Section A of the questionnaire, because they solicited demographic information from respondents.

Ordinal scales, also referred to as Close-ended ordered response options (Toepoel, 2016), made up a significant proportion of the questionnaire (Section B and Section C) because the questions sought to examine the experiences of the female Information and Communications Technology

professionals at Telkom. The Likert scale was employed as an Ordinal scale for this study. Other scales, such as the Interval scale described by Field (2009) and Zigmund (2013), comprised the principle of a fixed distance between 1 and 2, and 2 and 3, which had to be an equal distance. The Ratio scale indicates the highest measurement levels as it contains all characteristics of classification, order, fixed distance, and zero origin, and other measures including weight, height, distance, population count, and other measures not used in the current study. (For possible statistical analysis and tests relating to the various scales, see Table 5.8)

Table 5. 8: Types of measurement scales

Scale	Basic empirical operations	Typical use		
			Descriptive	Inferential
Nominal	Determination of equality	Classification: Male-Female Gender	Percentages Mode	Chi-square Binomial test
Ordinal	Determination of greater or less	Ranking: Preference data Attitude measures Psychological measures	Median	Mann-Whitney ANOVA Rank-order correlation
Interval	Determination of equality of intervals	Index numbers Attitude measures Level of knowledge	Mean Range Standard deviation	Product moment correlation T-test Factor analysis ANOVA
Ratio	Determination of equality of ratios	Sales Units produced Number of customer		Coefficient of variation

Source: Tull and Hawkins, cited in May (2004:132)

In terms of this study, a combination of scales was used in search of the required information for analysis purposes. Both Nominal and Ordinal scales were used for the questionnaire in Stage 2. In stage 3, a qualitative study using in-depth interviews was adopted to furnish the data required to investigate research objective 5.

The amended final questionnaire is presented in Appendix D of this document. Statistical techniques used in this study will be discussed in the next section.

5.6.5.1. Descriptive statistics

Descriptive statistics were aligned with organising, and summarising the observations of the study (Kern, 2013). Similarly, Singpurwalla (2013) viewed descriptive statistics as a

descriptive approach. Descriptive statistics allowed the researcher to describe data and present findings in a comprehensible manner, such as percentages, means and standard deviations. Conner (2017) stated that the most common types of descriptive statistics were the measures of central tendency (mean, median, and mode) used in most levels of mathematics, research, evidence-based practice, and quality improvement.

Descriptive statistics were employed to summarise all the data generated by the survey for this study. Measures in the form of frequencies, central tendency, dispersion/variability – mean, and standard deviation were used to explore aims 1 and 2 of this study. The analysis process involved transforming a mass of raw data into tables and charts, with frequency distribution, and percentages, to provide critical answers to the research questions.

5.6.5.1.1. Frequencies

The sample characteristics were established using frequencies and percentages. Following this, the mean and standard deviations were used to interpret the overall responses concerning this study's dimensions and scales, under Stage 2.

5.6.5.1.2. Measures of Central tendency and measures of Dispersion/variability

Central tendency is described by median, mode, and the means (there are different means-geometric and arithmetic). Thomas (2004:208) stated that “measures of dispersion illustrate the degree to which the distribution values are spread out around the mean and are commonly called measures of variability, these include range, variance, and standard deviation.” Thomas (2004) further postulated that variance was one of the essential concepts in quantitative research analysis.

Dispersion is the degree to which data is distributed around this Central tendency, and is represented by a range, deviation, variance, standard deviation, and standard error. Measures of Central tendency are figures used to characterise the center or middle of a set of data values. The mean, median, and mode are three frequently used measures of central tendency. Sekaran and Bougie (2010:189) stated, “the range of a set of observations is the difference between the largest observation and the smallest observation and is regarded as a simple measure of dispersion.” Standard deviations (sd) and mean scores were used in Stage 2 of this study to identify the range of responses in the questionnaire's different sections. The measures of Central tendency and Dispersion were also used to describe the questionnaire items' pattern for each scale.

5.6.5.2. Inferential statistics

Inferential statistics are concerned with reaching conclusions beyond the study (Kern, 2013). Generalisations, estimates, and predictions may be based on inferential statistics (Singpurwalla, 2013). Inferential statistical techniques used to test the questionnaire results in Stage 2 of the study included the T-test, analysis of variance (ANOVA), and Pearson's product-moment correlation coefficient.

5.6.5.2.1. T-test

Welman and Kruger (2004:213) stated that "the T-test assessed if two groups had comparable or different mean scores. Descriptive research compared the mean of one group with that of another group and established whether an observed difference in the means of two groups was big enough to be accredited to a change in some variable or whether the change was accredited to chance."

The T-test was used to examine the relationships between variables in Stage 2 of this study.

5.6.5.2.2. The Analysis of Variance (ANOVA)

The analysis of variance involves quantitative analytical procedures and relates to the analysis of group differences rather than individual differences (Sekaran and Bougie, 2010). The purpose of this analysis is to establish the differences between the control groups, whether the dependent variable is large enough to indicate that they are unlikely to have occurred by chance.

These tests were used to determine whether the different sub-groups of the demographic variables, such as age, gender, marital status, differ amongst themselves, which is of interest in Stage 2 of the study.

5.6.5.2.3. Pearson Product-moment Correlation Coefficient

Pearson product-moment correlation coefficient is a data analysis technique utilised to establish linear associations between two continuous variables (Kline, 2016). Pearson product-moment correlation was undertaken to explore the correlations between all the variables.

In Pearson's correlation analysis, the type of correlation is categorised by considering what happens to one variable as the other one increases. Positive values represent a positive linear relationship, whilst negative values represent a negative linear relationship (Pearson, 1948). Values close to zero indicate that there is no relationship, whilst those close to -1 and +1 denote a closer linear relationship. For the purposes of this study, Cohen (1988) advanced seminal

guidelines in interpreting Pearson product-moment correlation coefficient values (r) as summarised in Table 5.9.

Table 5. 9: Correlation coefficient interpretation guidelines

Correlation coefficient (r)	Interpretation of correlation
0.10 – 0.29	Weak
0.30 – 0.49	Moderate
≥ 0.50	Strong

Source: Cohen (1988:77)

The results of the Pearson product-moment correlation coefficient values were presented in correlation matrixes. For the purposes of this study, strong correlation coefficients of 0.50 and above will be discussed in relation to the literature in chapter 7.

5.7. Stage 3: Qualitative study

In Stage 3, a qualitative study, using personal interviews, was developed to obtain more information from the respondents, to furnish the data required to investigate research objective 5. The researcher utilised semi-structured interviews to gain an insight into female Information and Communications Technology professionals’ experiences, to gather more information needed for the development of a framework, designed to assist organisations develop good work-life balance initiatives.

During the final stage, 16 participants were available for the semi-structured interviews depicted in table 5.10.

Table 5. 10: Participants in the interview

CLASSIFICATIONS OF JOBS	PARTICIPANTS IN THE INTERVIEW
Operations specialists	2
Senior data management managers	4
Junior ICT Technicians	4
Systems technicians	2
ICT Technicians	2
Data base network administrators	3
Total	16

The interviews were conducted face-to-face, at Telkom Headquarters. The main objective of the interviews was to discuss the scope, requirements, and plan for the implementation of the research. See figure 5.6.

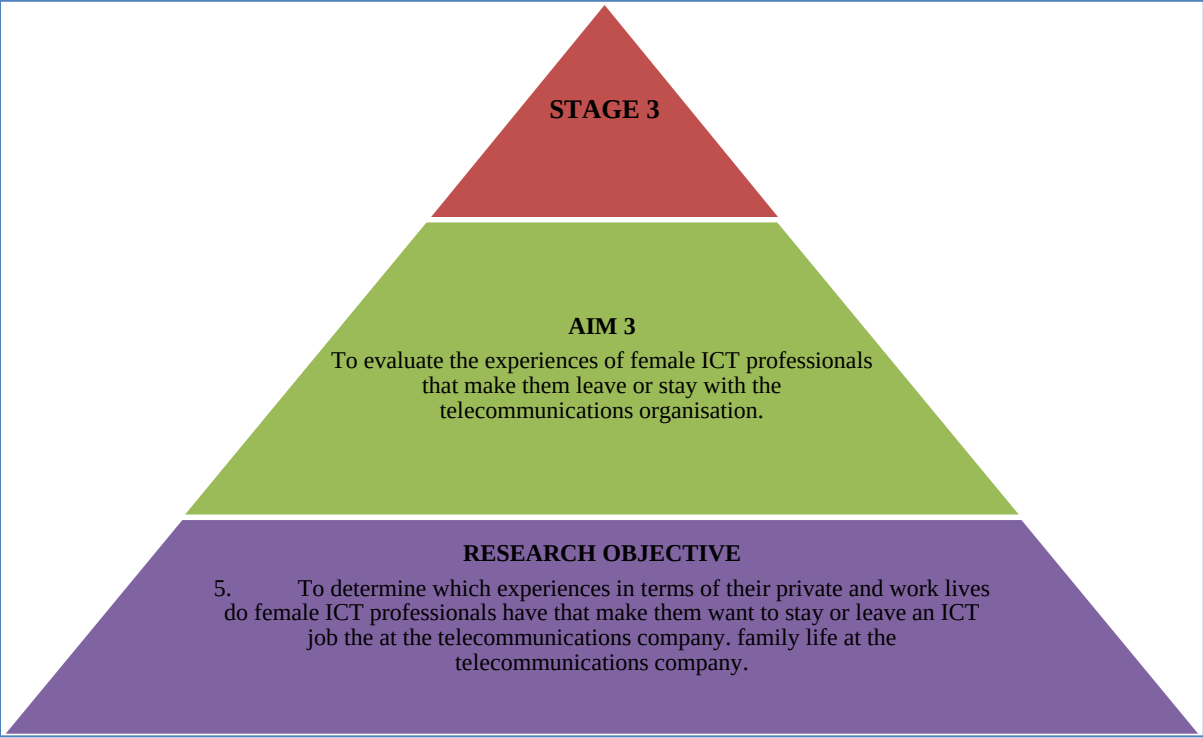


Figure 5. 6: Research design for Stage 3 of the study

5.7.1. Sample and Sampling technique

The sampling technique used in the qualitative stage was Non-Probability Sampling, in line with the purpose of gathering information from female ICT professionals. This technique was utilised in order to obtain the right sample that could provide the researcher with the required information. Sekaran and Bougie (2016) stated that, in non-probability sampling, the population element did not have a predetermined chance of being selected as sample subjects. Non-probability sampling using purposive sampling was chosen for this qualitative stage of the study, based on the researcher’s existing knowledge of female ICT professionals. A limited number of participants had the traits the researcher was interested in, as information had to be specific to only a select few that were required for the study.

The researcher then conducted individual semi-structured interviews with 16 Telkom Headquarters employees. The sixteen female participants were chosen by way of utilising semi-structured interviews of approximately one-hour duration. The interviews were recorded with the consent of the participants. More information on the qualitative research participants is

provided in the previous Table 5.10. Sixteen (16) interviews were completed. Nine (9) participants were unavailable for the interviews due to time constraints and other commitments.

5.7.2. Data collection method

This stage of the study consisted of various steps namely, preparing for data collection, collecting the actual data, analysing the collected data, and writing up the results. Each step is discussed in the following section.

5.7.2.1. Preparing for data collection

At the commencement of the study, when the researcher approached Telkom, the first point of call was the Human Resource Manager of the Telkom, who then introduced the researcher to the female ICT employees of interest. The researcher was given a list of the names of the ICT employees of interest, with their respective email contact details. The researcher then contacted the employees and requested them to fill in “*The Work-Life Balance Study Employee On-Line Survey*”, which linked them to the interviews, based on their availability and willingness to participate in the study. Table 5.11 shows interviews with all the 16 participants who took part in interview process and their responsibilities.

Table 5. 11: List of interviews conducted with female ICT professionals

CLASSIFICATIONS OF JOBS	PARTICIPANTS IN THE INTERVIEW	RESPONSIBILITIES
Operations specialists	2	Has Direct contact with clients and day-to-day operations.
Senior data management managers	4	Managerial level Controls/ influences junior personnel
Junior ICT Technicians	4	Lower-level personnel.
Systems technicians	2	Work hand in hand with ICT technicians.
ICT Technicians	2	Work hand in hand with Systems Technicians.
Data base network administrators	3	Mid-level personnel.
Total	16	

Table 5.11 illustrates those female ICT professionals who were in the best position to provide the most information-rich data regarding the Telkom's work-life balance perceptions and experiences. To make the participants comfortable before the interview was conducted, the researcher had a brief conversation with them to set the tone and ensure that they were relaxed enough to proceed.

Before beginning their participation in the study, all the participants submitted a signed consent form (See Appendix C) which confirmed their approval for participation, and anonymity in the study. The participants also signed an authorisation form for the semi-structured interview (See Appendix F) to be audio recorded for the data's transcription process. During these conversations, all the information and explanations regarding the research were discussed. The participants had the opportunity to ask or clarify any concerns about the process, so that every participant was clear about what was required of them before giving their consent to participate. At this point the Permission to Interview sheet (See Appendix F) and the Permission to Audio Record the Interview sheet (See Appendix F) were handed out to the participants for them to sign. This allowed each participant to become aware of the procedures and allow the researcher to address any personal questions before commencing the interviews.

The primary purpose of these interviews was to investigate Aim 3, objective 4 of the study, namely, to determine which experiences in terms of their personal and work lives could influence female ICT professionals' decision to stay or leave an ICT job in a telecommunications company.

The next section looks at the data collection method utilised, which was semi-structured Interviews.

5.7.2.2. Data collection method: Semi- structured Interviews

A semi-structured interview is flexible, and it allows the researcher to probe and expand participants' responses. In semi-structured interviews, there are predetermined questions on an interview guide, which can be modified based on the interviewer's perception; every participant gets the same question. However, there is flexibility in how the questions can be asked; and this is specifically useful in exploring the views and experiences of a person towards something (Teijlingen, 2014).

An interview schedule based on the theoretical frameworks used for the study called "*The Work-life Interview*" was designed in the form of a semi-structured interview, to gain more

insight into female ICT professionals’ experiences in the telecommunications company. It consisted of 24 interview questions (See Appendix F) and Figure 5.6 for more detail).

Table 5.12 below shows how the research objectives were aligned to the interview questions.

Table 5. 12: Alignment of research objectives to the interview questions

CONSTRUCTS	OBJECTIVE	QUESTION NUMBER
Work	(Objectives 1, 2 & 3)	1, 2, 3, 4, 5, 6, 7 & 8.
Home	(Objectives 4 & 5)	9, 10, 11, 12, 13, 14, 15, 16 & 17.
Work-life balance	(Objectives 4 & 5)	18, 19, 20, 21, 22, 23 & 24.

Figure 5.7 provides the interview schedule for the interviews with all the female ICT professionals. The primary purpose of these interviews was to gain more insight into the various experiences of female ICT professionals in a male-dominated sector.

SECTION A: ALL WORK-RELATED QUESTIONS 1. How would you define your work-life? 2. Do you have a work-life that represents you? 3. What is the boundary between your work and personal lives? 4. Do you think your work life has limitations? 5. How has your work life changed over time? 6. Do you find it hard to manage time in terms of work tasks, given the nature of your work? 7. Do you think you will stay in your job in the foreseeable future, given it's a male-dominated field? 8. How do your male counter parts treat you in this male-dominated field? SECTION B: ALL HOME-RELATED QUESTIONS 9. How would you define your personal/home life? 10. In what ways does your personal/family life represent you? 11. What is the boundary between your home and work lives? 12. Do you think your personal/home life has limitations? 13. How has your personal/home life changed over time? 14. What you do when you get home from work? 15. What do you do during the weekend? 16. In your household, how is the work divided; please answer under the following guidelines as it applies to you: house cleaning, laundry, cooking, taking care of the elderly/other family members and bathing the young children? 17. Do you find it hard to manage time in terms of home chores given the nature of your job? Has working with ICT and the internet made your personal life easy or complicated? SECTION C: ALL HOME-RELATED QUESTIONS 18. When you hear the phrase 'work-life balance' what does it make you think about? 19. As you go through everyday life, how do you manage your career and your personal life? 20. Do you think your organisation is doing enough to level the field for women in terms of Work-life Balance? 21. Do you believe in an ideal/perfect balance in life? Kindly explain. 22. Do you believe that a long-term balance is possible between personal life, professional life or career? 23. Do you think you have a balance between your personal life and your professional life? 24. Is your company or your manager flexible about your labour time, its arrangement and the place where you are working?

Figure 5. 7: Interview schedule for female ICT professionals at Telkom

In this research, data saturation signs started manifesting by the fourteenth (14th) interview, the process and their transcriptions, and use of respondent validation, the researcher observed that participants started providing similar responses as previous participants. According to Azami-Aghdash, Ghojazadeh, Gareh-Sheyklo, Daemi, Kolahdouzan, Mohseni, and Moosavi

(2015), a researcher reached the point of data saturation when additional interviews with new participants started yielding no distinctly new ideas. Besides, Saunders, Sim, Kingstone, Baker, Waterfield, Bartlam, and Jinks (2017) stated that data saturation seemed to represent a kind of gold standard, to demonstrate the research's quality. The next section discusses the data analysis of stage 3 of this study.

5.7.3. Data analysis

The current study adhered to Rubin and Rubin's (2011) model of responsive interviewing in which the researcher was responsible "for building a reciprocal relationship, honouring interviewees with unfailingly respectful behaviour, reflecting on their own biases and openly acknowledging their potential effect, and owning the emotional effect of interviews."

Based on the transcriptions of the audio recordings of each interview, thematic analysis was used to identify themes within the data gathered in the qualitative stage. By qualitatively coding the data and focusing on an organisation within it, one can create a detailed description of the data collected using thematic analysis (Creswell, 2014). There are several ways to encode, including lists of themes, complex models of themes, indicators with contingent relationships, or anything in between (Boyatzis, 1998). It is possible to study a variety of topics with this type of analysis, in addition to personal experiences. It allows data to support the interpretation (Guest, MacQueen & Namey, 2012).

Data analysis using *Atlas. ti* version 8, was used to connect the open codes into broader themes or categories. Open coding implies new codes as one reads through data and identifies and creates labels that can be improved upon observation. These categories were determined through induction, by digging deep into the data available, and establishing groups in the data through specific data excerpts. In an attempt to have similar items grouped, core themes were formed.

A theme as defined by Saldaña (2013:14) is "an outcome of coding, categorisation or analytical reflection".

The level of analysis used in this study was the five significant steps identified by Braun and Clarke (2006). It involves i) data organisation and reduction, ii) thematic analysis, iii) coding, iv) interpretation, and v) drawing conclusions.

Figure 5.8 shows how the five steps by Braun and Clarke (2006) were used in the current study.

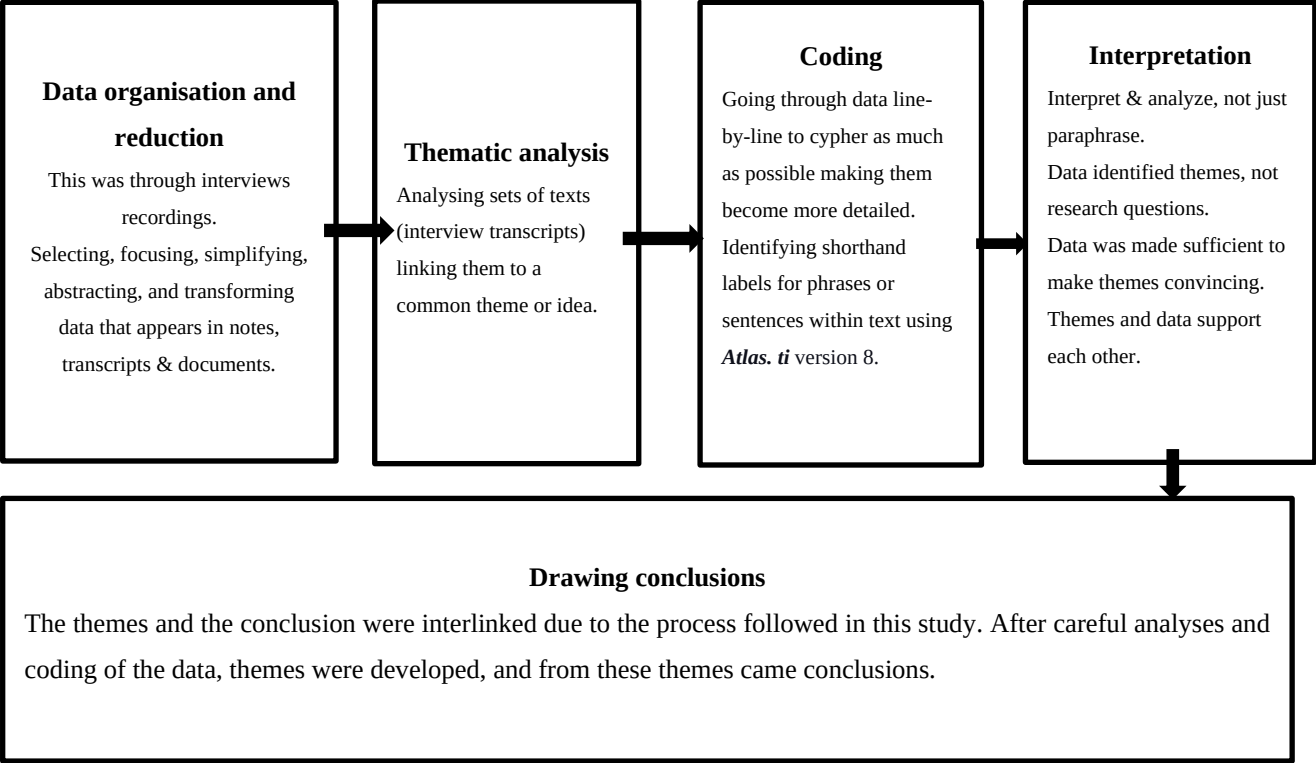


Figure 5. 8: The use of Braun and Clarke (2006)’s 5-Step level of analysis for the current study

In the beginning, the researcher collected and organised data. Notes, transcripts, and documents were selected, focused, simplified, abstracted, and transformed for this purpose.

By reading the data, the researcher became familiar with its contents and has generated a preliminary list of ideas regarding the data under consideration. During this process, codes were created in response to the questions asked. These codes (work-life balance, gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition) can be seen as elements of the data that are interesting or relevant to the researcher in terms of the phenomenon.

An inventory of codes was drawn up after all the data has been compiled and coded. Various codes were combined to form different themes by sorting them into different categories. Tables were used to sort the codes into multiple themes. In this step, some of the codes become main themes or sub-themes (e.g., Employee Assistance Programme and wellness Programme, Overtime, Sundays, work on public holidays), and others were left out.

Following the development of a set of themes, the themes were refined. The themes were merged, split, and some were ignored. The researcher examined the codes and data to make sure the generated themes relate to the codes and the entire dataset. For this part, the researcher needed to analyse the details, go through the process again, revisit the codes, and make sure there were no repetitions. The themes would be improved if some codes were merged. Codes were further divided into families, and these were then categorised into thematic areas, allowing the number of codes to be reduced. In the thematic approach, the number one step was organising the data. The current study proposed that this be done by recording the transcripts of the interviews after the participants had gone through the whole interview schedule.

After reading through the entire dataset, the researcher checked each theme and its content, ensuring that it was coded correctly and that some themes were not duplicated. As well, the researcher ensured that the features and subthemes fit within the specific theme. The subthemes were then moved to a different theme if that was not possible or they were ignored. The researcher ensured that the sub-themes, features, and responses supporting the themes represented each sub-theme and featured accurately.

Researchers drew up a thematic map that met his approval. Data from the themes were analysed, and the themes were further refined. Themes were given meaning to avoid overlapping.

The analysis of the data was done in such a way as to provide certainty to the reader about the merit and relevance of the conclusion. A brief, logical, reasonable, informative, and non-repetitive description of the story told by the data was the investigator's goal. Further, the researcher ensured that the number of data extracts was sufficient to indicate the frequency of a theme.

Atlas. ti version 8 was utilised for analysis as this was a more cost-effective way of doing this research. **Atlas. ti** version 8 was used to manage and structure the changing layers of analysis, identify connections within the data, organise data, document notes and themes.

To ensure thoroughness and transparency of the data analysis in this study, the choice was made to use **Atlas. ti** qualitative data analysis computer software (Fraser, 2017). The next section discusses reliability and validity in qualitative studies.

5.7.4. Reliability and validity

Carcary (2009) and Grosseohme (2014) stated that the essence of qualitative research reliability lies with consistency.

The concern also related to bias, and there were several types to consider (Saunders et al., 2009):

- Interview bias: This was the way in which interviewer's comment; their tone, intonation or non-verbal behaviour could influence the way in which interviewees answered the questions.
- Interviewee bias: This was created by perceptions that the interviewee could have of the interviewer, the purpose of the interview, and its desired outcome. This could result in a distorted response from the interviewee, who could try to portray themselves in a 'socially desirable' role.

To avoid bias in this study, the interviewer was aware of the many ways that can inadvertently lead to biased results, like not adhering to the interview guide and asking leading questions. Participants were also made to understand the interview process and why it was essential to ensure that they did not bias the study. In addition, the researcher understood that slanting the results could undermine the study's purpose or results.

"Reliability refers to measuring instruments, and the consistency of the measuring instrument, implying that reliability is the extent to which the findings of the study can be replicated." (Fink, 2013:66). Maharaj (2014) opined that everything was taken into consideration by the interviewer, to ensure that the interview location was safe, that both participant and interviewer felt comfortable, and had privacy. Silverman (2009) proposed five approaches in enhancing the reliability of process and results: Refutational analysis, constant data comparison, comprehensive data use, inclusive of the deviant case, and the use of tables.

George and Apter (2004) asserted that, as data were extracted from the sources, researchers had to verify their accuracy in terms of form and context, with constant comparison, and as Patton (1999) put it, either alone or with peers (a form of triangulation). Patton (1999) added that the scope and analysis of data included had to be as comprehensive, and inclusive as possible, in terms of the quantitative aspects.

In Stage 3, the qualitative phase of this study, reliability was achieved by verifying the accuracy of results, checking transcripts for errors, and sending copies of transcripts to respondents for a preview, to ensure that they were a true reflection of the interviews conducted.

Waterman (2013) explained that qualitative research validity meant ‘appropriateness’ of the tools, processes, and data. Whether the research question was valid for the desired outcome, the choice of methodology was appropriate for answering the research question, the design was valid for the methodology, the sampling and data analysis was appropriate, and finally, the results and conclusions were based on a valid sample and context.

Validity is one of the strengths of qualitative researcher. It can be achieved using the following strategies (Cresswell, 2009):

- triangulation of different sources of data
- member checking, that is, verification of the transcripts with the participants
- use of rich, thick descriptions to convey findings
- clarification of any bias that the researcher may bring to the research
- presenting of any negative or discrepant information that contradicts the themes
- spending prolonged time in the field
- peer debriefing to enhance the accuracy of the account
- use of an external auditor to enhance the accuracy of the account.

In this study, validity was achieved through the triangulation of results. Information was consolidated from different sources (interviews and Telkom HR documents from the Telkom Touch system and Telkom’s policies on working hours (Other Working Opportunities and Overtime) for 2015 to come to this conclusion. Verification of the transcriptions’ accuracy was done by reading and re-reading and transparently presenting all information even if it contradicted the research themes, which prompted the need to have carefully planned semi-structured interview questions to measure what was intended.

5.8. Ethical considerations

The fundamental purpose of research ethics is to protect the dignity and welfare of the research participants (Blanche et al., 2010). Research ethics provide researchers with guidelines for behaviours deemed right and wrong when conducting a research study. The ethical code includes aspects of privacy, anonymity and confidentiality of participants in research (Saunders et al., 2009). The following ethics principles were considered in this research study:

- *Autonomy and respect for the dignity of persons:* Prior to conducting the research study, ethical clearance had to be granted by the University of KwaZulu-Natal’s Research Ethics Committee (Pietermaritzburg). The researcher obtained full ethical clearance with protocol reference number: **HSS/0810/018D** (Refer to Appendix B1 and B2 for the original and amended ethical clearance certificates), which allowed the researcher

to conduct the research study. Autonomy and respect for dignity were established through informed consent (Fouka & Mantzourou, 2011). Participants were protected and informed by signing a consent form (Refer to Appendix C), which explained that they could participate of their own free will, thus were not compelled to participate in the study. Furthermore, participants had the choice to withdraw from the study at any given point in time if required. This was achieved through the explanation of the purpose of the study, study procedures, potential risks and benefits of the study, level of confidentiality, disclosure of possible conflict of interest, and most importantly their rights as participants.

- *Nonmaleficence*: Quigley, Levine, Sonnenfeld, Brown, Tian and Wei (2019:484) explained that, “nonmaleficence includes mitigating harms to place-based communities/cultural groups.” The researcher made sure to protect the anonymity of the participants by assigning pseudonyms to participants to hide their true identities. The researcher also made sure the participants felt comfortable with the research process, and all recordings and transcripts were handled with the highest level of confidentiality.

Beneficence: Quigley et al (2019:484) stated that “beneficence covers creating benefits to place-based communities/cultural groups and benefits from consulting stakeholders involved in place-based research.”

The study achieved beneficence by providing more insight into the concept of work-life balance of female ICT professionals, and a framework designed to benefit the organisation. The anonymity of respondents was well-maintained by not including their names in the detailed research findings, and in any consequent publications. Individual responses were presented in the form of themes to make identification of individual respondents impossible.

5.9. Delimitations

The first delimitation was the choice of problem itself, that is, the experiences of female ICT professionals in telecommunications. The delimitations in this study arose mainly from previous literature. The scope was limited to a few specific constructs, because of the dearth of other studies on female ICT professionals, and their experiences in a male-dominated field within the South African context.

Previous studies of female ICT professionals’ work-life balance experiences have been mainly of a qualitative, quantitative or comparative nature, therefore this study opted to adopt a mixed

methods approach of quantitative and qualitative, to provide substantive empirical evidence, as well as meanings and patterns of female ICT professionals' work-life balance experiences.

This study adopted a case study design with a mixed methodology, which also has design and methodology characteristics that limit the interpretation of the results. The results of this study could not be generalisable to other telecommunications settings other than where the data was collected. Therefore, if the study were to be repeated at a different telecommunications company, the results could vary. This stemmed largely from the fact that the institution chosen for the study had a limited number of females in their Information Communications and Telecommunications Department. The study was geographically delimited to Telkom in Pretoria, the number of cases being only 50 female ICT professionals. Respondents in this study were female ICT professionals employed at Telkom, and therefore the results could not be transferred to other groups of individuals.

5.10. Conclusion

This chapter provided the methodology followed in conducting this study, guided by the main problem outlined in chapter one. This chapter explained the research methodology employed in this study, and it also outlined the demographic information of the respondents. In this chapter, the research design was discussed. The researcher highlighted why a qualitative design was more appropriate for this research. The chapter furthermore covered the research design, construction of the questionnaire, and its administration. The selection of the sample was also examined. The explanation of the research process was aimed at ensuring credibility of the research, thus the assertions that it made in adding to the body of knowledge of work-life balance, with regards to female Information Communications and Technology professionals within the South African context. The findings of the analysis of each of the 3 stages, encompassing the four aims of the study were presented in the following three chapters, namely chapters 6, 7 and 8. The findings were consolidated in the discussion chapter, where the emerging themes, and their implications on individuals and organisational stakeholders, were discussed in detail.

Chapter 6

Stage 1: Secondary data collection

6.1. Introduction

This chapter presents the results of the secondary data collection phase of the study covering Aim 1, research objective 1 of this study. In this chapter, the frequency at which employees utilised the policies and programmes at Telkom is explored.

- Aim 1

To explore the awareness of existing work-life balance programmes in the telecommunications organisation.

- Objective 1

To investigate the organisation's features and personal practice through the information from surveys available from the telecommunications company that enable employees to achieve work-life balance at the telecommunications company.

Telkom offers several workplace provisions that guide work-life balance initiatives, as provided by the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the virtual assistance programme of **Telkom Touch**. The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 is a policy that stipulates work conditions based on the Republic of South Africa's labour laws. The other provision is the **Telkom Touch**, which is a virtual assistant used by Telkom to facilitate a comprehensive lifestyle management service for employees at every level. For each policy and programme, details are provided on the type of provision, how it addresses work-life balance need(s), and any specific conditions that affect employee access and use. The policies and programmes were obtained through the Human Resource Information System (HRIS) system of Telkom.

In the next section, usage of the Telkom policy over the nine months was explored.

The current study examined how workweeks, flexible working hours, hours of work, and meal intervals were used during the nine months of January 2018 to the October 2018. The actual fieldwork was done between the 27th August 2018 to the 30th May 2019.

The next section looks at the investigation of Telkom policy usage of work-place initiatives at Telkom and its related aspects for the nine months.

6.2.1. Telkom policy usage of work-place initiatives at Telkom

A detailed description of the results over three-month intervals of the statistical analysis of the hours utilised through the work-place initiatives at Telkom using descriptive statistics is provided in Table 6.1.

Table 6. 1: Measure of Central Tendency and Dispersion of workplace initiatives at Telkom for nine months of 2018

Descriptive Statistics					
	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Workweek: January-March	50	1	3	4.16	1.38
Workweek: April-June	50	1	3	4.22	1.40
Workweek: July-September	50	1	3	3.88	1.76
Flexible workhours-January-March	50	1	2	4.04	1.20
Flexible workhours-April-June	50	1	3	5.57	1.34
Flexible workhours-July-September	50	1	3	5.10	1.16
Reduced workweek-January-Mach	50	1	2	4.63	1.30
Reduced workweek-April-June	50	1	2	3.88	1.18
Reduced workweek-July-September	50	1	2	4.95	1.40
Hours of work-January-March	50	1	4	8.92	4.98
Hours of work-April-June	50	1	3	8.56	4.96
Hours of work-July-Sept	50	1	4	2.00	1.010
Meal intervals: January-March	50	1	2	5.4	3.80
Meal intervals: April-June	50	1	2	5.12	4.70
Meal intervals: July-September	50	1	2	6.26	4.08
Valid N (list wise)	50				

For the nine months of 2018, regarding the workweek, Table 6.1 shows mean scores for the three-month interval January-March (m=4.16), April-June (m=4.22), and July-September (m=3.88). This showed a constant pattern in the use of the workweek by respondents. The standard deviation for the three-month interval January-March (sd.=1.38), April-June (sd.=1.40), and July-September (sd.=1.76) implied respondents were more inclined towards the use of a traditional workweek, thus indicating minimal variations in the responses given by the respondents.

According to Table 6.1., for the nine months of 2018, regarding flexible work hours, for the three-month interval, the following means where obtained for January-March (m=4.04), April-June (m=5.57), and July-September (m=5.10. The following standard deviations were

obtained: January-March (sd.=1.20), April-June (sd.=1.34), and July-September (sd.=1.16). This depicted a constant pattern in the use of flexible work hours by respondents.

Table 6.1. for the nine months of 2018, regarding the reduced workweek, shows mean scores for the three-month interval January-March (m=4.63), April-June (m=3.88), and July-September (m=4.95). This showed a constant pattern in the use of the reduced workweek by respondents. The standard deviation for the three-month interval January-March (sd.=1.30), April-June (sd.=1.18), and July-September (sd.=1.40) implied respondents were more inclined towards the use of a reduced workweek, thus indicating minimal variations in the responses given by the respondents.

According to Table 6.1., the nine months of 2018, regarding the hours of work, mean scores for the three-month interval January-March (m=8.92), April-June (m=8.56), and July-September (m=2.00). The results indicated a constant non-usage of the hours of work by respondents for periods of January-March and April-June. It is only the period of July-September that revealed an inclination towards using the hours of work. The standard deviation for the three-month interval January-March (sd.=4.30), April-June (sd.=4.18), and July-September (sd.=1.40) implied respondents were more inclined towards the non-usage of hours of work for January-March and April-June. The usage of hours for the period of July-September was revealed. This indicated a variation in the respondents' responses between the period of January-March, April-June, and July-September.

For the nine months of 2018, regarding the meal intervals, Table 6.1, mean scores for the three-month interval January-March (m=5.4), April-June (m=5.12), and July-September (m=6.12). The results indicated a constant pattern of non-usage of meal intervals by respondents for all three periods. The standard deviation for the three-month interval January-March (sd.=3.80), April-June (sd.=4.70), and July-September (sd.=4.08) implied respondents were more inclined towards the non-use of meal intervals, thus indicating minimal variations in the responses given by the respondents.

The first statistical analysis of the work-place initiatives at Telkom was the workweek. The usage of the workweek for the nine months is explored in the next section.

6.2.1.1. Workweek usage over nine months of 2018

Workweek entails the total number of hours or days worked in a week. Over the nine months, the patterns of the traditional workweek were examined. The results indicated that the workweek’s responses leaned more closely toward observing the standard workweek. The responses according to Figure 6.1 over the nine months amounted to 12.26 hours, with an average of 1.36 hours for every respondent, confirming that the respondents were more inclined to observe a traditional workweek. For the first interval of January-March, the descriptive statistics according to Figure 6.1 indicated that thirty-two respondents (64.0%) observed the traditional workweek, followed by eighteen respondents (36.0%). There were no unspecified respondents for this first period. In accordance with Figure 6.1, the second interval, April-June, revealed that thirty-one respondents (62.0%) observed the traditional workweek, followed by seventeen respondents (34.0%) who did not observe the traditional workweek. There were no unspecified respondents for this first period. The July-September period had descriptive statistics that indicated that thirty-six respondents (72.0%) observed the traditional workweek, closely followed by eleven respondents (22.0%). There were three (6.0%) unspecified respondents for this first period.

Figure 6.1 shows the frequency distribution of workweek observance over the nine months of 2018.

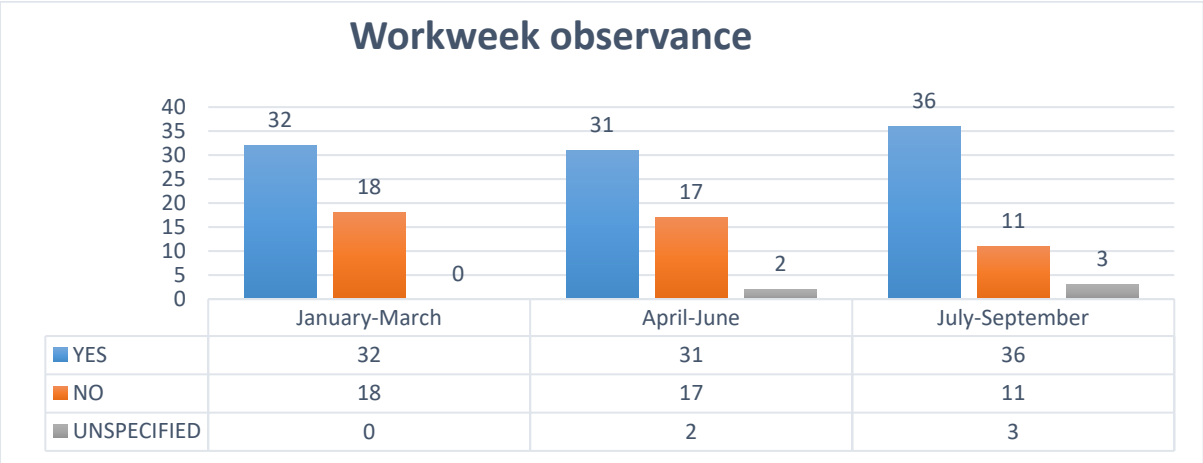


Figure 6. 1: Frequency distribution of workweek observance

The next section looks at flexible working hours.

6.2.1.2. Flexible work hours’ usage over nine months of 2018

Over the nine months’ period, with research conducted over three-month intervals, the patterns of the flexible work hours were examined. The findings showed that the responses on the workweek leaned more closely towards flexible work hours. The responses over the nine

months, measured over the three-month period intervals, amounted to 3.656 hours, with an average of 1.22 hours for every respondent, confirming that the respondents were more inclined to observe flexible work hours. The trend according to Figure 6.1 over the nine months was that forty employees were utilising flexible hours during the first three months, and the next three months showed a drop to thirty-five employees. The last three months saw an increase to forty-five employees utilising the flexible working hours. A detailed account for the first interval of January-March, the descriptive statistics according to Figure 6.1 indicated that forty respondents (80.0%) utilised the flexible working hours option, followed by ten respondents (20.0%). There were no unspecified respondents for this first period. In accordance with Figure 6.2, the second interval, April-June, revealed that thirty-five respondents (70.0%) utilised the flexible working hours option, followed by thirteen respondents (26.0%) who did not use that option. There were two (4.0%) unspecified respondents for this first period. The July-September period had descriptive statistics that indicated that forty-five respondents (90.0%) utilised the flexible working hours option, then two respondents (4.0%) who did not use that option. There were three (6.0%) unspecified respondents for this first period.

Figure 6.2 shows the frequency distribution of flexible working hours over the nine months period in 2018.

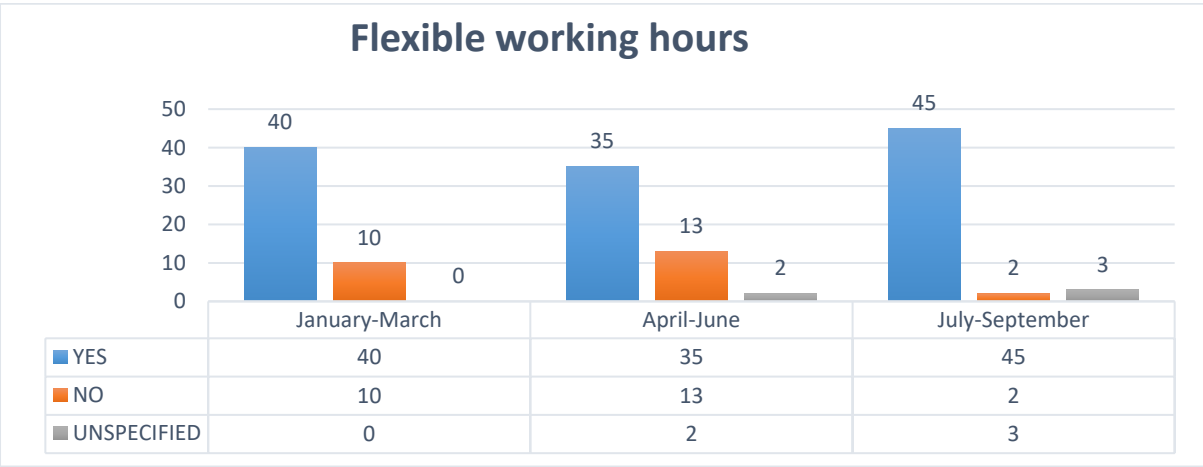


Figure 6. 2: Frequency distribution of flexible working hours

The next section looks at the results on the reduced workweek.

6.2.1.3. Reduced workweek usage over nine months of 2018

The reduced workweek was measured over three-month intervals over nine months. The means and standard deviation indicated an inclination towards the usage of the reduced workweek. The responses over the nine months, measured over the three-month period intervals amounted

to 4.08, with an average of 1.36 for every respondent, confirming that the respondents were more inclined to opt for reduced workweek. The trend according to according to Figure 6.2 over the nine months was that, during the first period of the three months, thirty-five employees were utilising the reduced workweek and the next three months showed an increase to forty-one employees. The last three months saw a drop to thirty employees utilising the reduced workweek.

A detailed account for the first interval of January-March, the descriptive statistics according to Figure 6.2 indicated that thirty-five respondents (70.0%) utilised the reduced workweek option, followed by fifteen respondents (30.0%). There were no unspecified respondents for this first period. In accordance with Figure 6.2, the second interval, April-June, revealed that forty-one respondents (82.0%) utilised the reduced workweek option, then nine respondents (18.0%) who did not use that option. There were no unspecified respondents for this first period. The July-September period had descriptive statistics that indicated that thirty respondents (60.0%) utilised the reduced workweek option, then twenty respondents (40.0%). There were no unspecified respondents for this first period.

Figure 6.3 shows the frequency distribution of reduced workweek over the nine months of 2018.

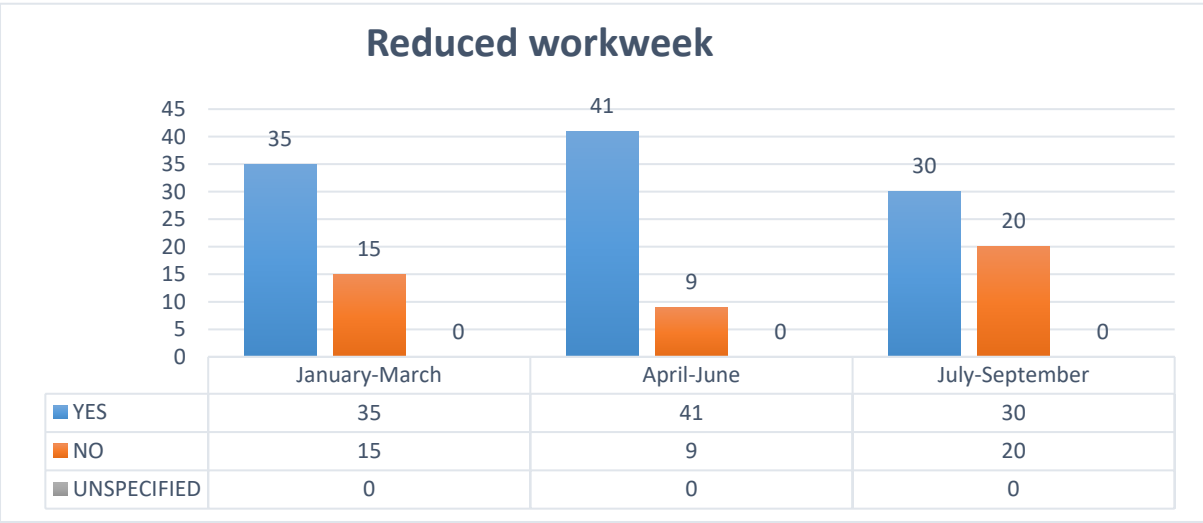


Figure 6. 3: Frequency distribution of reduced workweek

The next section looks at the results of hours of work.

6.2.1.4. Hours of work usage over nine months of 2018

The hours of work were sub-divided into the following scale:

- 40 hours;

- 41-50 hours;
- 51-60 hours;
- 61+ hours.

The hours of work were measured over three-month intervals over a nine months’ period. The means and standard deviation indicated, a propensity towards the use of 40 hours of work more than the other working hours. The responses over the nine months, measured over the three-month period intervals amounted to 5.158 for 40 hours with an average of 1.72 for every respondent, confirming a trend that the respondents were more inclined to observe 40 hours of work more than the other working hours.

A detailed account for the first interval of January-March, the descriptive statistics according to Figure 6.3 indicated that eighteen respondents (36.0%) utilised 40 hours of work, followed by seventeen respondents (34.0%) who utilised between 41-50 hours of work. Thirteen respondents (26.0%) utilised between 51-60 hours of work and two (4.0%) respondents used 60 or more hours of work. In accordance with Figure 6.4, the second interval, April-June, revealed that nineteen respondents (38.0%) utilised 40 hours of work, followed by fourteen respondents (28.0%) who utilised between 41-50 hours of work. Seventeen respondents (34.0%) utilised between 51-60 hours of work and no respondents used 60 or more hours of work. The July-September period had descriptive statistics that indicated that twenty respondents (40.0%) utilised 40 hours of work, followed by fifteen respondents (30.0%) who utilised between 41-50 hours of work. Ten respondents (20.0%) utilised between 51-60 hours of work and five (10.0%) respondents used 60 or more hours of work.

Figure 6.4 shows the frequency distribution of hours of work over the nine months of 2018.

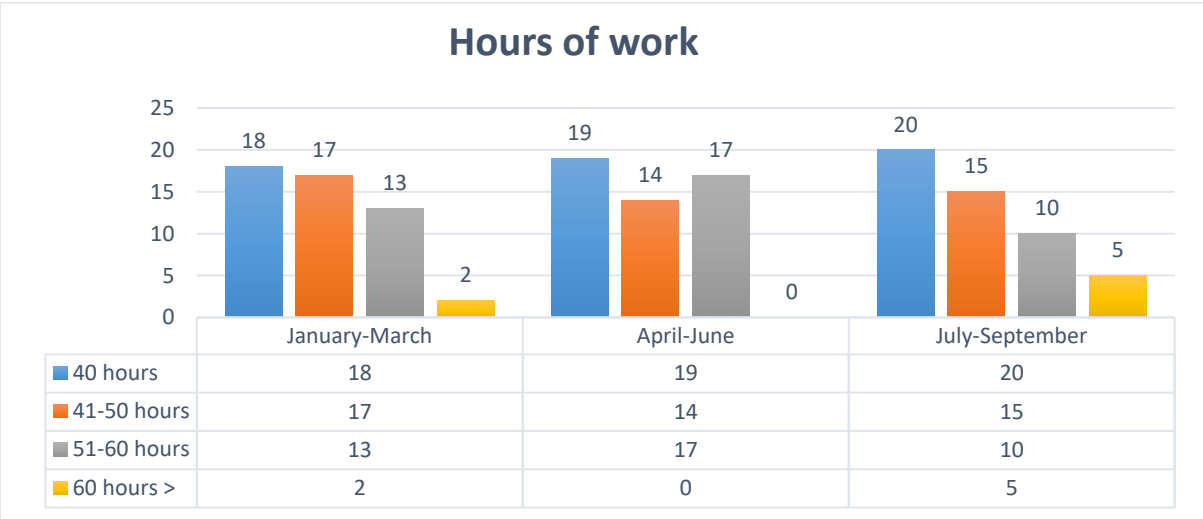


Figure 6. 4: Frequency distribution of hours of work

The next section looks at the meal intervals feature at Telkom.

6.2.1.5. Meal intervals usage over nine months of 2018

The meal intervals were categorised as follows:

- Provision of meal intervals after 5 hours of continuous work;
- No set meal intervals;
- Unspecified.

Over the nine months' period, the patterns of usage of meal intervals were examined. The findings showed that responses on the use of meal intervals were closely aligned with the provision of meal intervals after 5 hours of continuous work. The responses over the nine months amounted to 16.78, for set meal intervals with an average of 1.86 for every respondent, confirming that the respondents were more inclined to utilise meal intervals after 5 hours of continuous work. Figure 6.4 shows the frequency distribution of meal intervals over the nine months' period in 2018.

A detailed account for the first interval of January-March, the descriptive statistics according to Figure 6.4 indicated that thirty-seven respondents (74.0%) utilised the meal interval option, followed by thirteen respondents (26.0%) who did not. There were no unspecified respondents for this first period. In accordance with Figure 6.4, the second interval, April-June, revealed that thirty-three respondents (66.0%) utilised the meal interval option, then fourteen respondents (28.0%) who did not use that option. There were three (6.0%) unspecified respondents for this first period. The July-September period had descriptive statistics that indicated that twenty respondents (46.0%) utilised the meal interval option, then thirteen respondents (26.0%). There were no unspecified respondents for this first period.

Figure 6.5 shows the frequency distribution of meal intervals over the nine months of 2018.

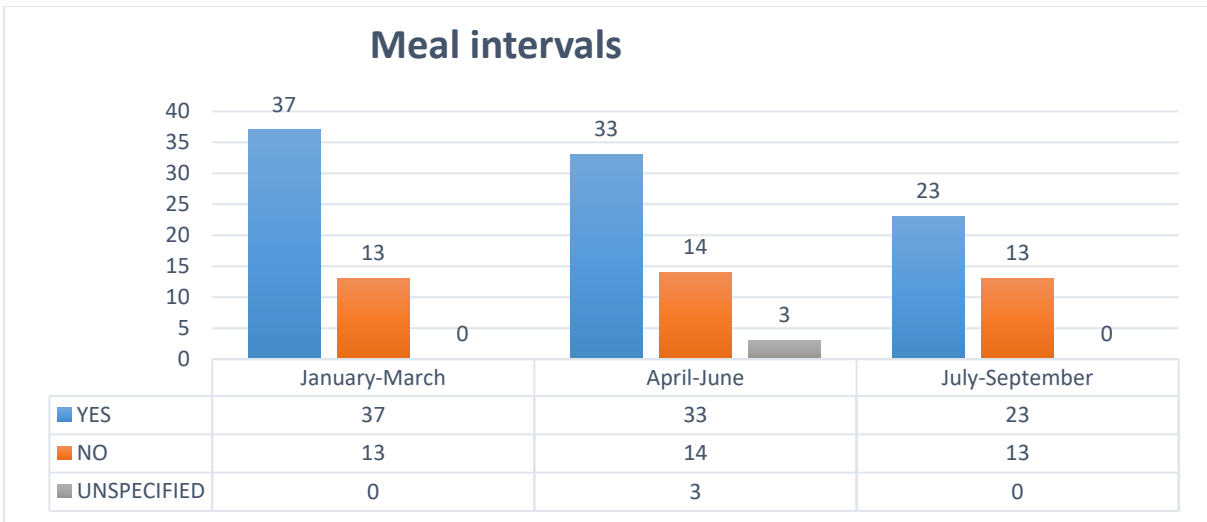


Figure 6. 5: Frequency distribution of meal intervals

This concludes the results on the usage of work-place initiatives at Telkom. The next section looks at the second aspect: The usage of telecommuting arrangements at Telkom, and its related aspects for the nine months’ period.

6.2.2. Usage of Telkom policy on telecommuting arrangements at Telkom

The results of Telkom policy usage of the telecommuting arrangements at Telkom were as follows: Working from or closer to home, Shift work, Changing Shift Schedules, Overtime, and Call-out (also referred to as *T-421*). A detailed description of the statistical analysis results of the working features at Telkom using descriptive statistics is provided in Table 6.2.

Table 6. 2: Measure of Central Tendency and Dispersion of the telecommuting arrangements at Telkom for nine months of 2018

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Working from or closer to home: Jan-Mar	50	1	3	6.67	1.62
Working from or closer to home Apr-June	50	1	3	5.75	1.42
Working from or closer to home Jul-Sept	50	1	3	5.35	1.40
Shift work: Jan-Mar	50	1	4	2.36	1.139
Shift work: Apr-Jun	50	1	4	9.01	2.38
Shift work: Jul-Sep	50	1	4	2.28	1.031
Changing shift schedules: Jan-Mar	50	1	2	4.43	1.65
Changing shift schedules: Apr-June	50	1	2	4.60	1.77
Changing shift schedules: Jul-Sept	50	1	2	7.17	1.85
Overtime: Jan-Mar	50	1	6	2.12	1.304
Overtime: Apr-June	50	1	6	2.26	1.468
Overtime: Jul-Sep	50	1	6	2.16	1.299
Call-Out (T-421) *: Jan-March	50	1	2	3.82	1.17
Call-Out (T-421) *: Apr-June	50	1	2	4.41	1.27
Call-Out (T-421) *: Jul-Sept	50	1	2	5.83	1.25
Valid N (list wise)	50				

*** Call-Out (also referred to as T-421)**

A detailed description of the statistical analysis results of Telkom’s telecommuting arrangements using descriptive statistics which is working from or closer to home is provided in the next section.

6.2.2.1. Working from or closer to home over nine months of 2018

According to Table 6.2, working from or closer to home was measured over three-month intervals over the nine months. The first interval was the January-March period, which revealed a mean ($m=6.67$) and standard deviation ($sd.= 1.62$). The means and standard deviation indicated a tendency towards working from home compared to working closer to home. The descriptive statistics according to Figure 6.6 indicated that twenty-four respondents (48.0%) preferred working from home, closely followed by twenty-one respondents (42.0%) working closer to home. There were five unspecified respondents (10.0%) for this first period.

Table 6.2 shows that the second interval was the April-June period, which revealed a mean ($m=5.75$) and standard deviation ($sd.=1.42$). The mean and standard deviation indicated an inclination to work from home compared to working closer to home. The descriptive statistics according to Figure 6.6 showed thirty-one respondents (62.0%) preferred working from home,

and seventeen respondents (34.0%) working closer to home. There were two unspecified respondents (4.0%) for this period.

The third interval was the July-September period, and according to Table 6.2, it revealed a mean ($m=5.75$) and standard deviation ($sd.=1.40$). The mean and standard deviation indicated an inclination towards working from home compared to working closer to home. The descriptive statistics according to Figure 6.6 indicated that thirty-one respondents (62.0%) preferred to work from home, and eighteen respondents (36.0%) work closer to home. There was one unspecified respondent (2.0%) for this period.

The January-March period had the highest mean, while the July-September period had the lowest. The mean score values for the three intervals are presented in descending order:

- January-March ($m=6.67$, $sd.=1.62$)
- April-June ($m=5.75$, $sd.=1.42$)
- July-September ($m=5.75$, $sd.=1.40$).

Figure 6.6 shows the frequency distribution of working from home or closer to home over nine months of 2018.

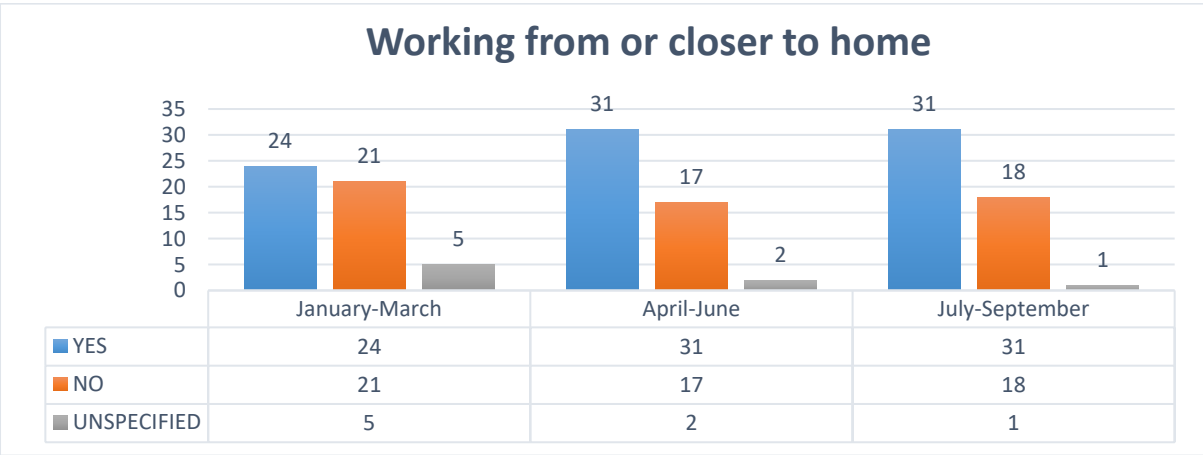


Figure 6. 6: Frequency distribution of working from or closer to home

Telkom’s telecommuting arrangements using descriptive statistics which is shift work usage over nine months of 2018 is provided in the next section.

6.2.2.2. Shift work usage over nine months of 2018

Shift work was measured over three-month intervals over a nine months' period. The shift work hours were categorised as follows:

- shift hours of 5;
- shift hours of 6;
- shift hours of 7;
- shift hours of 8 or >.

According to Table 6.2., the first interval was the January-March period, which revealed a mean ($m=2.36$) and standard deviation ($sd.=1.139$). The mean and standard deviation indicated a propensity towards the use of the lower hours of shift work. The descriptive statistics according to Figure 6.7 showed fifteen respondents (30.0%), which was the highest utilised 5 hours of shift work, closely followed by thirteen respondents (26.0%) using 6 hours of shift work. Eleven respondents (22.0%) utilised 7 hours of shift work, and another eleven respondents (22.0%) utilised 8 hours or greater of shift work. There were no unspecified respondents for this period.

The second interval was the April-June period, according to Table 6.2 revealed a mean ($m=9.01$) and standard deviation ($sd.=2.38$). The mean and standard deviation indicated a propensity towards the higher shift hours of 7 hours. The descriptive statistics according to Figure 6.7 showed ten respondents (20.0%) utilised 5 hours of shift work, followed by fifteen respondents (30.0%), which was the highest using 6 hours of shift work. Twenty-one respondents (42.0%) utilised 7 hours of shift work, and another four respondents (8.0%), which was the lowest, used 8 hours or greater of shift work. There were no unspecified respondents for this period.

As per Table 6.2, the third interval was the July-September period, which revealed a mean ($m=2.28$) and standard deviation ($sd.=1.031$). The mean and standard deviation indicated a tendency towards the use of fewer hours of shift work. The descriptive statistics according to Figure 6.7 showed thirteen respondents (26.0%) utilised 5 hours of shift work, closely followed by 18 respondents (36.0%), which was the highest number this period, using 6 hours of shift work. Eleven respondents (22.0%) utilised 7 hours of shift work, and eight respondents (16.0%), which was the lowest for this period, used 8 hours or greater of shift work. There were no unspecified respondents for this period.

The April-June period had the highest mean, while the July-September period had the lowest. The mean score values for the three intervals are presented in descending order:

- April-June (m=9.01, sd.=2.36)
- January-March (m=2.36, sd.=1.139)
- July-September (m=2.28, sd.=1.031).

Figure 6.7 shows the frequency distribution of shift hours over nine months of 2018.

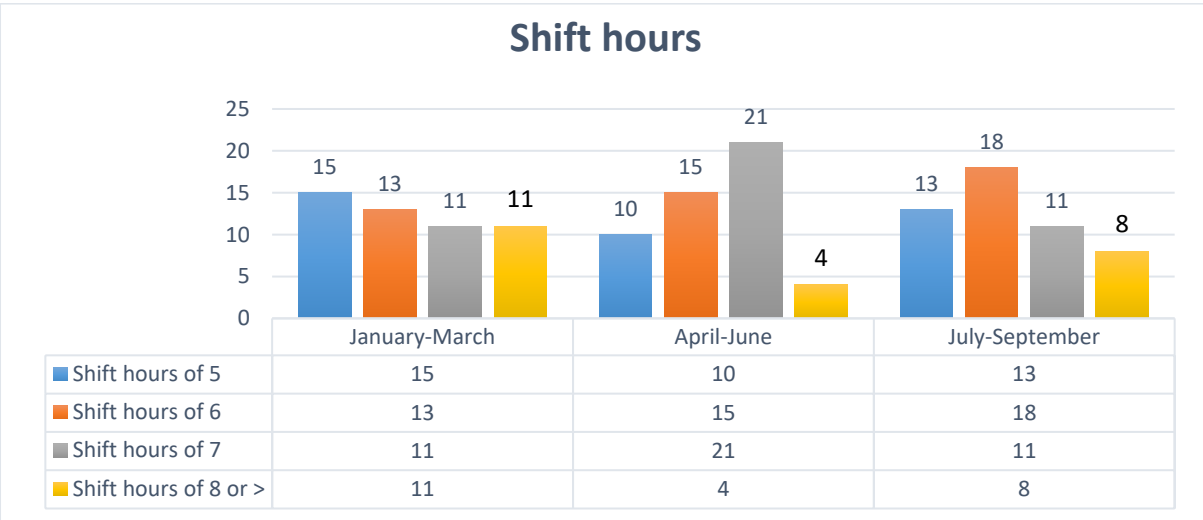


Figure 6. 7: Frequency distribution of shift hours

The next section looks at changing shift schedules usage over nine months of 2018.

6.2.2.3. Changing Shift Schedules usage over nine months of 2018

Changing Shift Schedules was categorised as follows:

- Planned;
- Inadvertent;
- Unspecified.

According to Table 6.2, changing shift schedules were measured over three-month intervals over the nine months. The first interval was the January-March period, which revealed a mean (m=4.43) and standard deviation (sd.= 1.65). The means and standard deviation indicated a tendency towards the use of inadvertent changing shift schedules. The descriptive statistics according to Figure 6.8 showed that thirty-three respondents (66.0%) made use of inadvertent changing shift schedules, closely followed by seventeen respondents (34.0%) who made use of planned changing shift schedules. There were no unspecified respondents for this first period.

The second interval was the April-June period, according to Table 6.2 revealed a mean (m=4.43) and standard deviation (sd.=1.65). The mean and standard deviation indicated a propensity towards the use of inadvertent changing shift schedules. The descriptive statistics according to Figure 6.8 showed thirty-five respondents (70.0%) made use of inadvertent changing shift schedules accounting for the highest number, followed by fourteen respondents (28.0%). There was one (2.0% unspecified respondent for this period.

As per Table 6.2, the third interval was the July-September period, which revealed a mean (m=7.17) and standard deviation (sd.=1.85). The mean and standard deviation indicated a propensity towards the use of inadvertent changing shift schedules. The descriptive statistics according to Figure 6.8 showed 21 respondents (42.0%) made use of inadvertent changing shift schedules accounting for the highest number, closely followed by 18 respondents (36.0%). There were eleven (22%), unspecified respondents for this period.

The July-September April-June period had the highest mean, while the January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- July-September (m=7.17, sd.=1.85)
- April-June January (m=4.60, sd.=1.77)
- January-March (m=4.43, sd.=1.65).

Figure 6.8 shows the frequency distribution of changing shift schedules over the nine months of 2018.

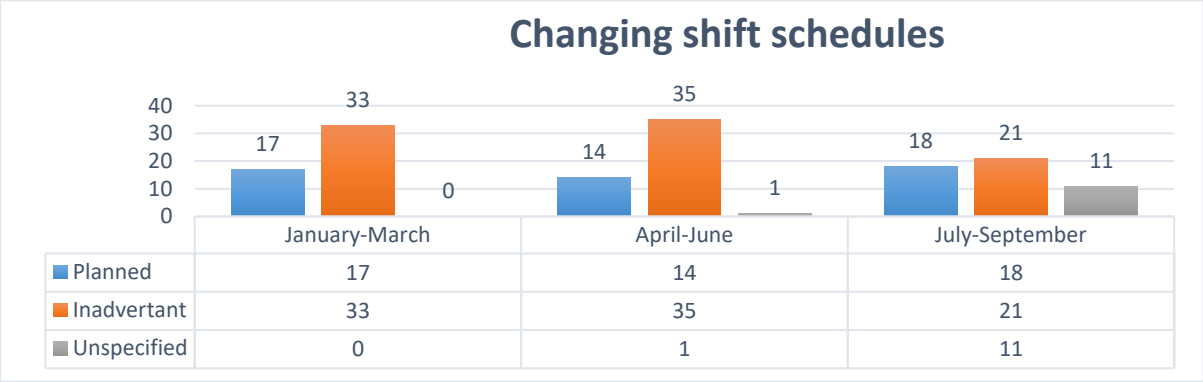


Figure 6. 8: Frequency distribution of changing shift schedules

The next section looks at overtime usage over nine months of 2018.

6.2.2.4. Overtime usage over nine months of 2018

Overtime was measured over three-month intervals over a nine months' period. The overtime hours were categorised as follows:

- 2 Hours
- 3 Hours
- 4 Hours
- 5 Hours
- 6 Hours
- 7 Hours or >.

According to Table 6.2., the first interval was the January-March period, which revealed a mean ($m=2.12$) and standard deviation ($sd.=1.304$). The mean and standard deviation indicated an inclination towards fewer hours of overtime. The descriptive statistics according to Figure 6.8 showed twenty-two respondents (44.0%) utilised 2 hours' overtime, and twelve respondents (24.0%) utilised 3 hours of overtime. Eight respondents (16.0%) utilised 4 hours of overtime, and another five respondents (10.0%) utilised 5 hours of overtime. Two respondents (4.0%) used 6 hours of overtime, and the lowest was 7 hours or more significant with one respondent (2.0%). There were no unspecified respondents for this period.

Table 6.2. showed that the second interval was the April-June period. This period revealed a mean ($m=2.26$) and standard deviation ($sd.=1.468$). The mean and standard deviation indicated an inclination towards fewer hours of overtime. According to Figure 6.8, the descriptive statistics showed twenty respondents (40.0%) utilised 2 hours' overtime, and fifteen respondents (30.0%) utilised 3 hours of overtime. Five respondents (10.0%) utilised 4 hours of overtime, and four respondents (8.0%) utilised 5 hours of overtime. Four respondents (8.0%) used 6 hours of overtime, and the lowest was 7 hours or more generous with two respondents (4.0%). There were no unspecified respondents for this period.

As per Table 6.2., the third interval was the July-September period. This period revealed a mean ($m=2.16$) and standard deviation ($sd.=1.299$). The mean and standard deviation indicated an inclination towards fewer hours of overtime. The descriptive statistics according to Figure 6.8 showed eighteen respondents (36.0%) utilised 2 hours' overtime, and twenty respondents (40.0%) utilised 3 hours of overtime. Three respondents (6.0%) utilised 4 hours of overtime, and five respondents (10.0%) utilised 5 hours of overtime. Three respondents (6.0%) used 6 hours of overtime, and the lowest was 7 hours or more significant with one respondent (2.0%). There were no unspecified respondents for this period.

The April-June period had the highest mean, while the January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- April-June (m=2.26, sd.=1.468)
- July-September (m=2.16, sd.=1.299)
- January-March (m=2.12, sd.=1.1304).

Figure 6.9 shows the frequency distribution of overtime over the nine months of 2018.

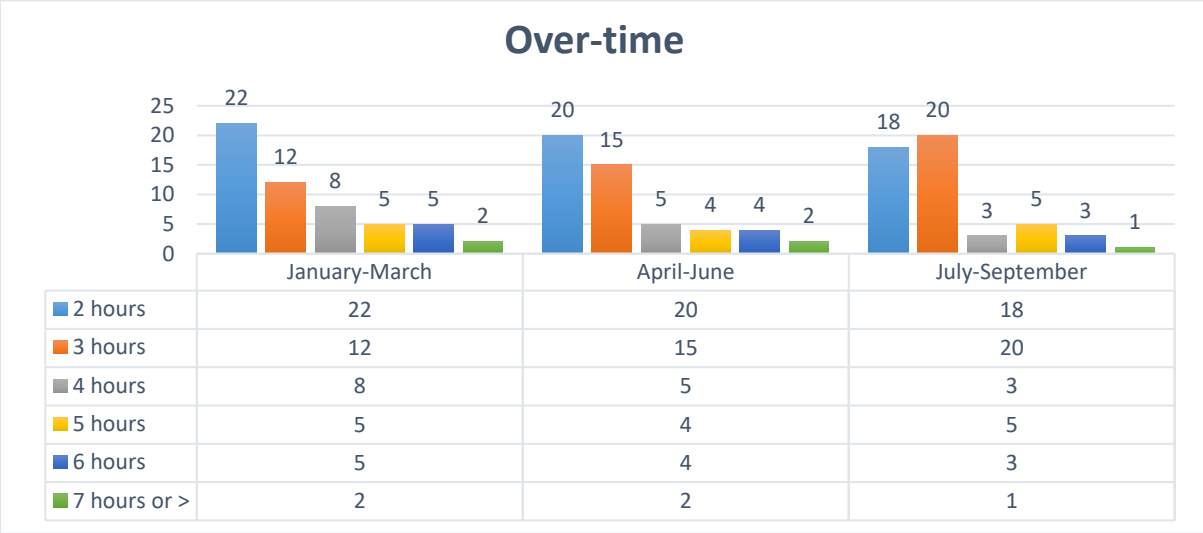


Figure 6. 9: Frequency distribution of overtime

The next section looks at the Call-out (also referred to as *T-421*).

6.2.2.5. Call-out (also referred to as *T-421*) usage over nine months of 2018

Over the nine months, the Call-out (also referred to as *T-421*) system was examined. According to Table 6.2., the results indicated that the responses were closely linked to the Call-out usage (also referred to as *the T-421*) system. The nine months’ responses were measured over three-interval periods and a mean of (m=3.82) and a standard deviation (sd=1.17) for the first interval of January-March. The descriptive statistics according to Figure 6.9 indicated forty-one (82.0%) utilised the Call-out (also referred to as the *T-421*) system, and nine (18.0%) did not. There were no unspecified respondents for this period.

According to Table 6.2, the second interval was the April-June period, which revealed a mean of (m=4.41) and a standard deviation (sd=1.27). The descriptive statistics according to Figure 6.9 indicated thirty-seven (74.0%) utilised the Call-out (also referred to as the *T-421*) system, and thirteen (26.0%) did not. There were no unspecified respondents for this period.

According to Table 6.2, the third interval was the July-September period, which revealed a mean of (m=5.83) and a standard deviation (sd=1.25). The descriptive statistics according to Figure 6.9 indicated thirty-eight (76.0%) utilised the Call-out (also referred to as the *T-421*) system, and twelve (24.0%) did not. There were no unspecified respondents for this period.

The means and standard deviations for all three intervals indicated an inclination towards the use of the Call-out (also referred to as the *T-421*) system.

The July-September period had the highest mean, while the January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- July-September (m=5.83, sd.=1.25)
- April-June (m=4.41, sd.=1.27)
- January-March (m=3.82, sd.=1.17).

Figure 6.10 shows the frequency distribution of the Call-out (also referred to as *T-421*).

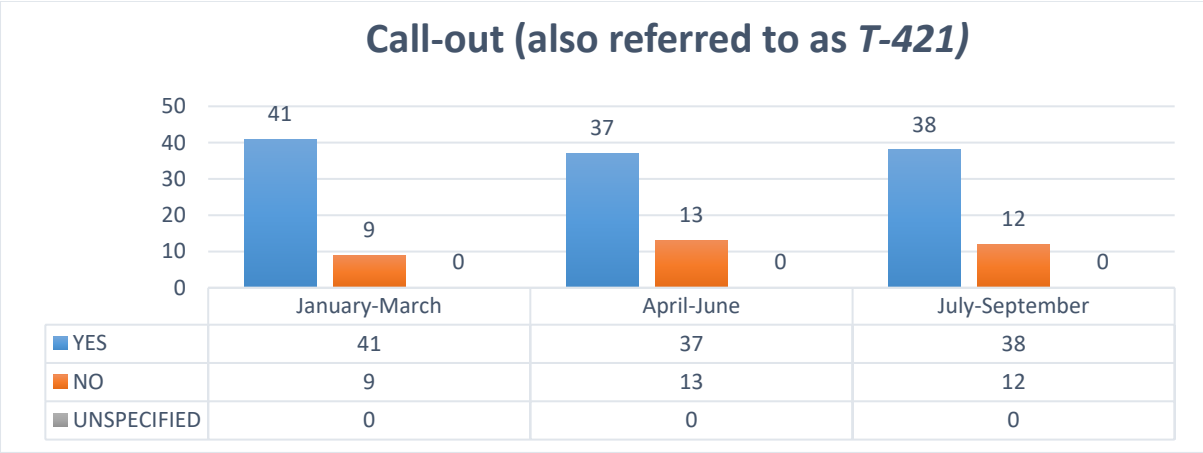


Figure 6. 10: Frequency distribution of the Call-out (also referred to as *T-421*)

This concludes the policy usage of the telecommuting arrangements at Telkom. The next section looks at work and leave arrangements at Telkom, and its related aspects, for the nine months’ period.

6.2.3. Telkom policy usage of work and leave arrangements at Telkom

The results of Telkom policy usage of work and leave arrangements at Telkom were as follows: Work on Sundays, work on Public Holidays, and overtime for Management and Specialist Levels. A detailed description of the analysis of the statistical results on non-standard days at Telkom, using descriptive statistics, is provided in Table 6.3.

Table 6. 3: Measure of Central Tendency and Dispersion of work and leave arrangements at Telkom for nine months of 2018

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Work on Sundays: Jan-Mar	50	1	3	6.46	1.52
Work on Sundays: Apr-Jun	50	1	3	6.93	1.64
Work on Sundays: Jul-Sept	50	1	3	9.00	1.92
Work on holidays: Jan-Mar	50	1	3	4.52	2.00
Work on holidays: Apr-Jun	50	1	3	4.88	1.92
Work on holidays: Jul-Sept	50	1	3	6.39	2.00
Overtime for Management and Specialist Levels: Jan-Mar	7	1	1	0.00	1.00
Overtime for Management and Specialist Levels: Apr-Jun	5	1	2	4.88	1.29
Overtime for Management and Specialist Levels: Jul-Sept	6	1	2	3.78	1.14
Valid N (list wise)	7				

6.2.3.1. Work on Sundays usage over nine months of 2018

Work on Sundays was measured over three-month intervals over the nine months. The first interval was the January-March period, which revealed a mean ($m=6.46$) and standard deviation ($sd.=1.52$). The mean and standard deviation indicated a tendency towards working on Sundays. The descriptive statistics according to Figure 6.11 indicated twenty-eight (56.0%) worked on Sundays, and eighteen (36.0%) did not. There four (8.0%) unspecified respondents for this period.

The second interval was the April-June period, which revealed a mean ($m=6.93$) and standard deviation ($sd.=1.64$). The mean and standard deviation indicated an inclination towards work on Sundays. According to Figure 6.11, the descriptive statistics showed that twenty-four respondents (48.0%) worked on Sundays, while twenty respondents (40.0%) did not work on Sundays. There were six unspecified respondents (12.0%).

The third interval, the July-September period, showed a mean ($m=9.00$) and standard deviation ($sd.=1.92$). The mean and standard deviation indicated an inclination towards work on Sundays. The descriptive statistics according to Figure 6.11, indicated that twenty-two respondents (44.0%) worked on Sundays, and ten respondents (20.0%) did not work on Sundays. There were eighteen unspecified respondents (36.0%) for this period.

The July-September period had the highest mean, while the January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- July-September (m=9.00, sd.=1.92)
- April-June (m=6.93, sd.=164)
- January-March (m=6.46, sd.=1.52).

Figure 6.11 shows the frequency distribution of work on Sundays over the nine months of 2018.

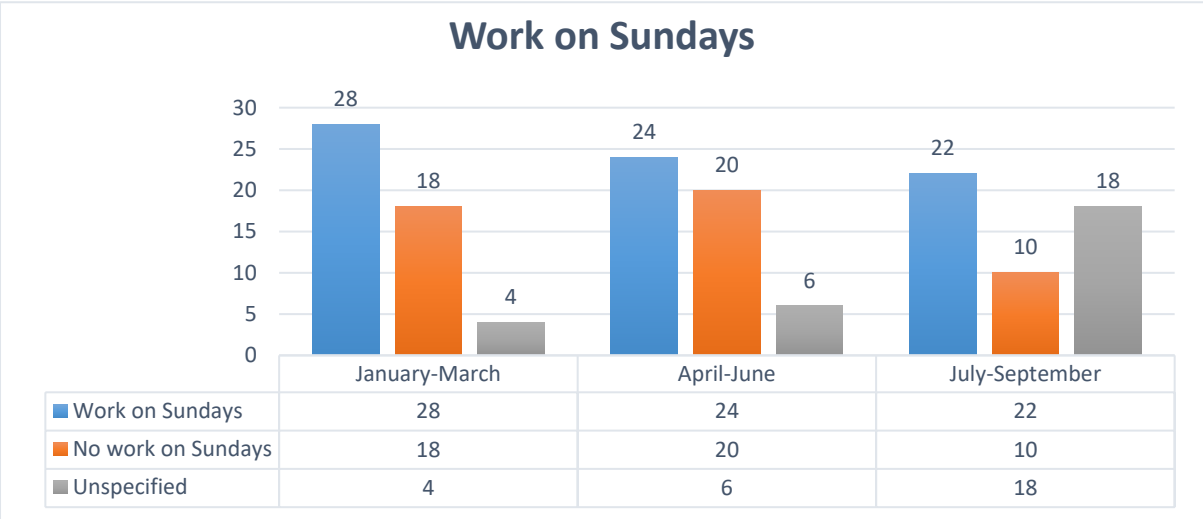


Figure 6. 11: Frequency distribution of work on Sundays

The next section looks at the descriptive results pertaining to Work on Public Holidays.

6.2.3.2. Work on Public Holidays usage over nine months of 2018

The Work on Public Holidays was measured over three-month intervals over the nine months. The period January to March revealed a mean (m=4.52) and standard deviation (sd.=2.00). The mean and standard deviation indicated participants were more inclined to not work on public holidays. According to Figure 6.11, the descriptive statistics showed forty respondents (80.0%) did not work on public holidays, and five respondents (10.0%) worked on public holidays. There were five unspecified respondents (10.0%) for this period.

April to June revealed a mean (m=4.88) and standard deviation (sd.=1.92). The mean and standard deviation showed a tendency towards participants not working on public holidays. Figure 6.11, in terms of the descriptive statistics, indicated thirty-eight respondents (76.0%) did not work on public holidays, and eight respondents (16.0%) worked on public holidays. There were four unspecified respondents (8.0%) for this period.

The period July to September revealed a mean ($m=6.39$) and standard deviation ($sd=2.00$). The mean and standard deviation indicated participants being more inclined towards not working on public holidays. According to Figure 6.11, the descriptive statistics showed thirty respondents (60.0%) did not work on public holidays, and ten respondents (20.0%) worked on public holidays. There were ten unspecified respondents (20.0%) for this period.

The July-September period had the highest mean, while the January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- July-September ($m=6.39$, $sd.=2.00$)
- April-June ($m=4.88$, $sd.=1.92$)
- January-March ($m=4.52$, $sd.=2.00$).

Figure 6.12 shows the frequency distribution of work on Public Holidays over the nine months of 2018.

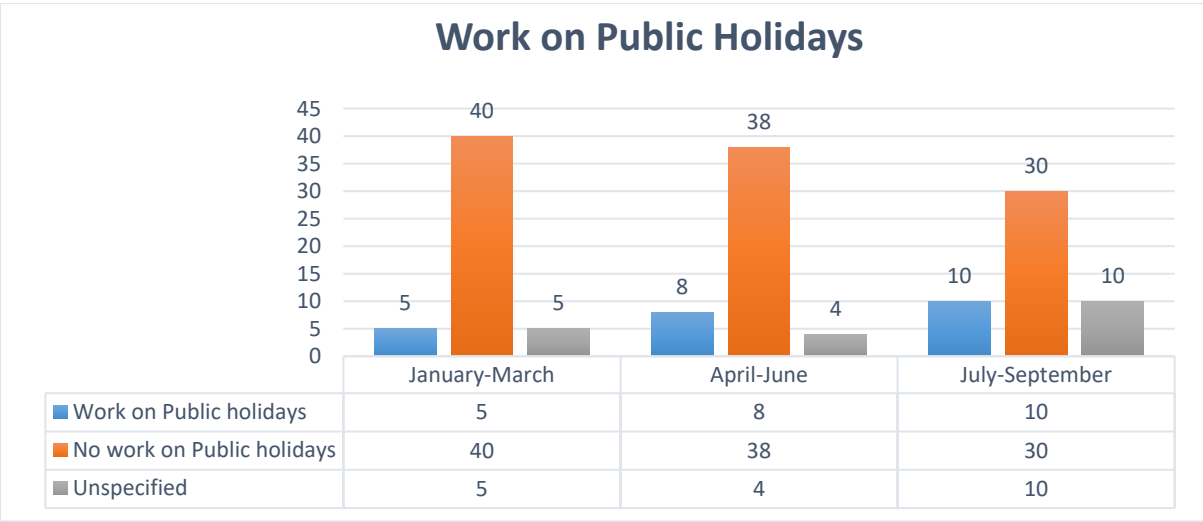


Figure 6. 12: Frequency distribution of work on Public Holidays

The next section looks at the descriptive results on overtime usage for Management and Specialist Levels over the nine months’ period.

6.2.3.3. Usage overtime for Management and Specialist Levels over nine months of 2018

The Overtime for Management and Specialist Levels was measured over three-month intervals over the nine months’ period. The staff members who qualified for this category were two Operations Specialists and five Senior Data Managers. The first interval was January-March period, which revealed a mean ($m=1.00$) and standard deviation ($sd.=.00$). This meant that all

the seven (7) staff members utilised the overtime for management and specialist levels for the period.

The second interval, April – June, revealed that five respondents (10.0%) utilised the overtime for management and specialist levels, and two respondents (4.0%) did not. The missing items of 43 were because only seven staff members were eligible at this level. The third interval, July – September, revealed that six respondents (12.0%) utilised the overtime for management and specialist levels, and one respondent (2.0%) did not. The missing items of 43 were because only seven staff members were eligible applicable at this level. This concludes the section on the descriptive results related to the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the ***Telkom Touch***.

The July-September period had the highest mean, with the January-March period having the lowest.

The mean score values for the three intervals are presented in descending order:

- July-September (m=6.39, sd.=2.00)
- April-June (m=4.88, sd.=1.92)
- January-March (m=4.52, sd.=2.00).

In the next section, usage of the virtual assistance programme of ***Telkom Touch*** over the nine months' period is explored. The section follows the format of the previous section by looking at the ***Telkom Touch*** programme utilising the themes:

- Theme 1: Work-place initiatives at Telkom
- Theme 2: Telecommuting arrangements at Telkom
- Theme 3: Work and leave arrangements at Telkom.

6.3. The usage of work-place initiatives at Telkom over nine months

Telkom has an employee assistance programme (EAP) policy, which aims to look at the employees' health welfare at Telkom. The employee assistance programme is a 24/7 service, provided through an external organisation, to offer guidance and counseling to employees. Employees can engage in this programme in-person or via telephone or email or the ***Telkom Touch*** System.

The employee assistance programme provides guidance and counseling for employees with human/life problems, whether it be alcohol or drug-related addiction, physical, mental, or emotion, or other distressing concerns. Other services provided by the employee assistance programme include child and elderly care referral services, personal counseling, nutrition planning, and legal advice.

Telkom provides wellness services for its employees, and the wellness programme consists of several different initiatives targeted at employee health and wellbeing. Telkom employees get discounts on gymnasium memberships, subsidies for purchasing personal fitness equipment, sponsorship for sports competitions, an on-site fitness facility, workshops for improving personal health, plus other health-related services such as on-site blood donor clinics. The wellness programme provides services to employees geared to enhance their work-life balance. Telkom employees are at liberty to engage in the programmes as per their individual needs without having to first negotiate with their supervisors or managers.

The Work-based health and wellness services were measured over three-month intervals over the nine months’ period. Work-based health and wellness services at Telkom is depicted in Table 6.4.

Table 6. 4: Measure of Central Tendency and Dispersion of the usage of work-based health and wellness services at Telkom

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
E.A.P usage: Jan-Mar	50	1	3	8.10	1.58
Apr-Jun- E.A.P usage	50	1	3	4.52	1.14
Jul-Sept- E.A.P usage	50	1	3	8.14	1.52
Jan-Mar-Wellness Programme	50	1	3	7.13	1.32
Apr-Jun- Wellness Programme	50	1	3	8.63	1.50
Jul-Sep- Wellness Programme	50	1	3	6.47	1.30
Valid N (list wise)	50				

A detailed description of the results of the statistical analysis of work-based health and wellness services at Telkom, using descriptive statistics, is provided in the following section.

6.3.1. The use of the Employee Assistance Programmes over nine months

The first interval was the January-March period, which revealed a mean ($m=8.10$) and standard deviation ($sd.=1.58$). The mean and standard deviation indicated an inclination towards the use

of Employee Assistance Programmes. According to Figure 6.13, the descriptive statistics showed that thirty-one respondents (62.0%) utilised the Employee Assistance Programmes option, and nine respondents (18.0%) did not use it. There were ten unspecified respondents (20.0%) for this period.

The second interval, the April-June period, revealed a mean ($m=4.52$) and standard deviation ($sd.=1.14$). The mean and standard deviation showed an inclination towards the use of Employee Assistance Programmes. As per Figure 6.13, the descriptive statistics showed forty-five respondents (90.0%) as having utilised the Employee Assistance Programmes option, and three respondents (6.0%) not having used it. There were two unspecified respondents (4.0%) for this period.

The third interval July-September period revealed a mean ($m=8.14$) and standard deviation ($sd.=1.52$). The mean and standard deviation showed a tendency towards the use of Employee Assistance Programmes. According to Figure 6.13, the descriptive statistics indicated that thirty-four respondents (68.0%) utilised the Employee Assistance Programmes option, and six respondents (12.0%) did not utilise it. There were ten unspecified respondents (20.0%) for this period.

The July-September period had the highest mean, with the April-June period having the lowest. The mean score values for the three intervals are presented in descending order:

- July-September ($m=8.14$, $sd.=1.52$)
- January-March ($m=8.10$, $sd.=1.58$)
- April-June ($m=4.52$, $sd.=1.14$).

Figure 6.13 shows the frequency distribution of the usage of the Employee Assistance Programme over nine months of 2018.

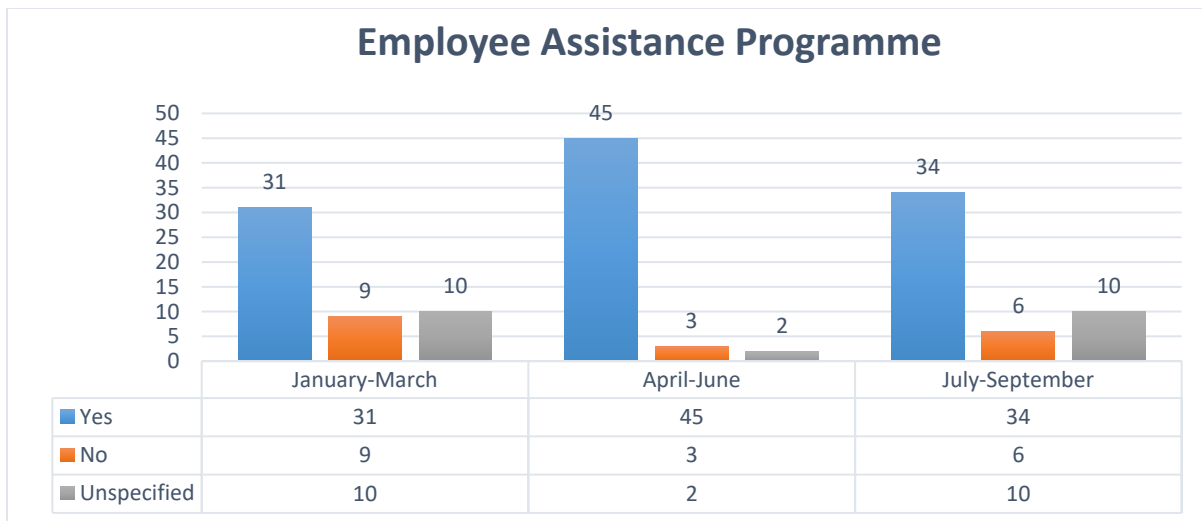


Figure 6. 13: Frequency of distribution of the usage of Employee Assistance Programme

The next section looks at results pertaining to the use of the wellness programme over the nine months’ period.

6.3.2. The use of the wellness programme over nine months

The first interval, the January-March period, revealed a mean ($m=7.131$) and standard deviation ($sd.=1.32$). The mean and standard deviation showed an inclination towards the use of Employee Assistance Programmes. According to Figure 6.13, the descriptive statistics indicated forty-one respondents (82.0%) utilised the Employee Assistance Programmes option, and two respondents (4.0%) did not utilise it. There were seven unspecified respondents (14.0%) for this period.

The second interval, the April-June period, revealed a mean ($m=8.63$) and standard deviation ($sd.=1.50$). The mean and standard deviation showed a tendency towards the use of Employee Assistance Programmes. According to Figure 6.13, the descriptive statistics indicated thirty-seven respondents (74.0%) utilised the Employee Assistance Programmes option, and one respondent (2.0%) did not utilise it. There were twelve unspecified respondents (24.0%) for this period.

The third interval, the July-September period, revealed a mean ($m=6.47$) and standard deviation ($sd.=1.50$). The mean and standard deviation showed respondents leaned towards the use of Employee Assistance Programmes. According to Figure 6.13, the descriptive statistics indicated forty respondents (80.0%) utilised the Employee Assistance Programmes option, and

five respondents (10.0%) did not utilise it. There were five unspecified respondents (10.0%) for this period.

The April-June period had the highest mean, with the July-September period having the lowest. The mean score values for the three intervals are presented in descending order:

- April-June (m=8.63, sd.=1.50)
- January-March (m=7.13, sd.=1.32)
- July-September (m=6.47, sd.=1.30).

Figure 6.14 shows the frequency distribution of the usage of the Wellness Programme over nine months of 2018.

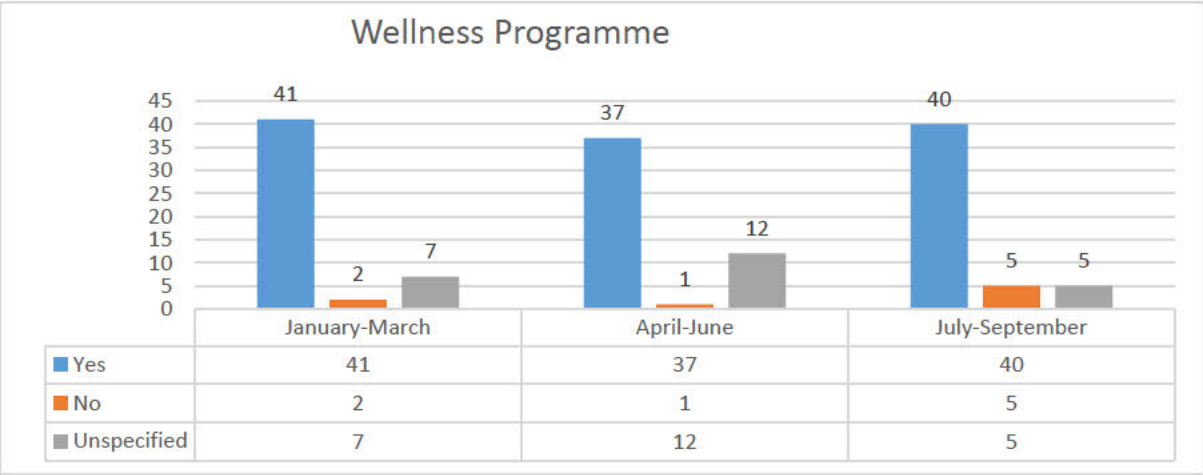


Figure 6. 14: Frequency distribution of the usage of the Wellness Programme

The next section looks at the telecommuting arrangements of the Telkom Touch at Telkom.

6.4. The usage of Telkom Touch and the telecommuting arrangements at Telkom over nine months

The working practices were measured over three-month intervals over the nine months. The next section looks at Telkom’s working practices and their related aspects over nine months 2018. The results of *Telkom Touch’s* usage of working practices at Telkom were as follows: Flexible working (parents and carers of adults in need of care), flexitime, and telework. A detailed description of the next section presents the usage of work practices at Telkom and its related aspects over nine months using descriptive statistics is provided in Table 6.5.

Table 6. 5: Measure of Central of Tendency and Dispersion of telecommuting arrangement at Telkom

	N	Minimum	Maximum	Mean	Std. Deviation
Flexible schedules and Telkom employees as carers: Jan-Mar	50	1	3	5.44	2.70
Flexible schedules and Telkom employees as carers: Apr-Jun	50	1	3	7.66	1.84
Flexible schedules and Telkom employees as carers: July-Sept	50	1	3	8.81	2.20
Flexitime: Jan-Mar	50	1	2	4.31	1.76
Flexitime: Apr-Jun	50	1	3	8.33	2.20
Flexitime: July-Sept	50	1	3	8.73	2.18
Telework: Jan-Mar-	50	1	3	8.81	2.00
Telework: Apr-Jun	50	1	3	8.56	1.96
Telework: July-Sep	50	1	3	7.35	1.52
Valid N (list wise)	50				

A detailed description of the statistical analysis results of the working practices at Telkom using descriptive statistics is provided in the following section. The flexible schedules and Telkom employees as carers are the first aspect to be examined.

6.4.1. Flexible schedules and Telkom employees as carers

The period January-March revealed a mean ($m=5.44$) and standard deviation ($sd.=2.70$). The mean and standard deviation showed disinclination towards flexible schedules and Telkom employees as carers. The descriptive statistics according to Figure 6.15 indicated two respondents (4.0%) utilised flexible schedules and Telkom employees as carers option, and eleven respondents (22.0%) did not utilise it. There were thirty-seven unspecified respondents (74.0%) for this period.

The period April-June revealed a mean ($m=7.66$) and standard deviation ($sd.=1.84$). The mean and standard deviation indicated a tendency towards flexible schedules and Telkom employees as carers. The descriptive statistics according to Figure 6.15 showed nineteen respondents (38.0%) utilised the flexible schedules and Telkom employees as carers option, and twenty respondents (40.0%) did not use it. There were eleven unspecified respondents (22.0%) for this period.

The period July-September revealed a mean ($m=8.81$) and standard deviation ($sd.=2.20$). The mean and standard deviation showed an inclination towards flexible schedules and Telkom

employees as carers. The descriptive statistics, according to Figure 6.15, indicated fifteen respondents (30.0%) utilised the flexible schedules and Telkom employees as carers option, and ten respondents (20.0%) did not use it. There were, however, twenty-five (50%) unspecified respondents for this period.

The varied results showed a staff composition that did not have many dependent elders at their respective homes.

The July-September period had the highest mean, with the January-March period having the lowest. The mean score values for the three intervals are presented in descending order:

- July-September (m=8.81, sd.=2.20)
- April-June (m=7.66, sd.=1.84)
- January-March (m=5.44 sd.=2.70).

Figure 6.15 shows the frequency distribution of flexible schedules and Telkom employees as carers over the nine months of 2018.

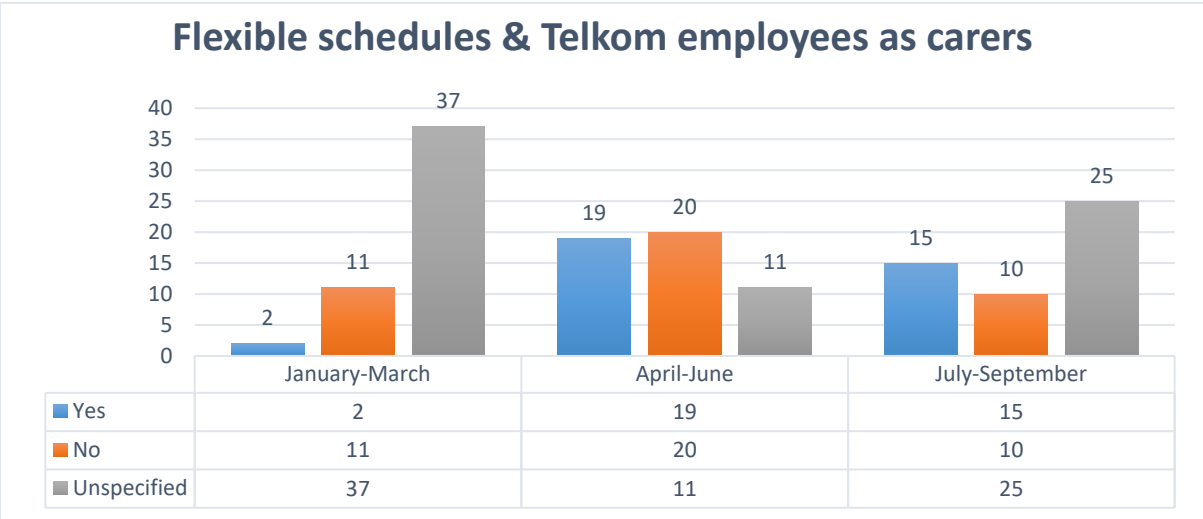


Figure 6. 15: Frequency distribution of the flexible schedules and Telkom employees as carers

The next section looks at flexitime for over nine months of 2018.

6.4.2. The usage of Flexitime over nine months

The period January-March revealed a mean (m=4.31) and standard deviation (sd.= 1.76). The mean and standard deviation showed disinclination towards flexitime. The descriptive statistics according to Figure 6.16 indicated twelve respondents (24.0%) utilised the flexitime option,

and thirty-eight respondents (76.0%) did not use it. There were no unspecified respondents for this period.

The period April-June revealed a mean ($m=8.33$) and standard deviation ($sd.=2.20$). The mean and standard deviation showed an inclination towards flexitime. The descriptive statistics according to Figure 6.16 indicated thirteen respondents (26.0%) utilised the flexitime option, and fourteen respondents (28.0%) did not use it. There were twenty-three unspecified respondents (46.0%) for this period.

The period July-September revealed a mean ($m=8.73$) and standard deviation ($sd.=2.18$). The mean and standard deviation showed an inclination towards flexitime. According to Figure 6.16, the descriptive statistics indicated fifteen respondents (30.0%) utilised the flexitime option, and eleven respondents (22.0%) did not use it. There were twenty-four unspecified respondents (48.0%) for this period. The results indicated that the respondents utilised the option of flexitime, and aside from the unspecified responses, the numbers of participants utilising this option were favourable except for the January-March period, which had a high number of non-utilisation of the option.

The July-September period had the highest mean, with the January-March period having the lowest. The mean score values for the three intervals are presented in descending order:

- July-September ($m=8.73$, $sd.=2.18$)
- April-June ($m=8.33$, $sd.=2.20$)
- January-March ($m=4.31$, $sd.=1.76$).

Figure 6.16 shows the frequency distribution of flexitime over the nine-months period of 2018.

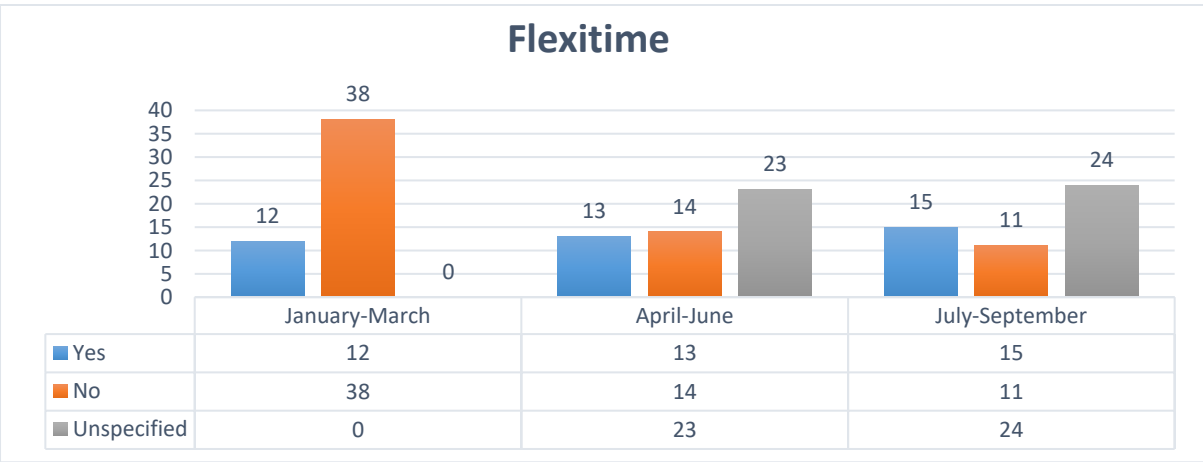


Figure 6. 16: Frequency distribution of flexitime

The next section looks at the usage of telework over a period of nine months.

6.4.3. The usage of telework over nine months

The first interval was the January-March period which revealed a mean ($m=8.81$) and standard deviation ($sd.=2.00$). The mean and standard deviation showed a tendency towards telework. The descriptive statistics according to Figure 6.17 indicated nineteen respondents (38.0%) utilised the telework option, and twelve respondents (24.0%) did not use it. There were nineteen unspecified respondents (38.0%) for this period.

The second interval was the April-June period which revealed a mean ($m=8.56$) and standard deviation ($sd.=1.96$). The mean and standard deviation showed an inclination towards telework. According to Figure 6.17, the descriptive statistics indicated nineteen respondents (38.0%) utilised the telework option, and fourteen respondents (28.0%) did not use it. There were seventeen unspecified respondents (34.0%) for this period.

The third interval was the July-September period which revealed a mean ($m=7.35$) and standard deviation ($sd.=1.52$). The mean and standard deviation leaned towards telework. According to Figure 6.17, the descriptive statistics indicated thirty-one respondents (62.0%) utilised the telework option, which was the highest for this period, and twelve respondents (24.0%) did not use it. There were seven unspecified respondents (14.0%) for this period.

The January-March period had the highest mean, while the July-September period had the lowest. The mean score values for the three intervals are presented in descending order:

- January-March ($m=8.81$, $sd.=2.00$)
- April-June ($m=8.56$, $sd.=1.96$)
- July-September ($m=7.35$, $sd.=1.52$).

Figure 6.17 shows the frequency distribution of telework over the nine months of 2018.

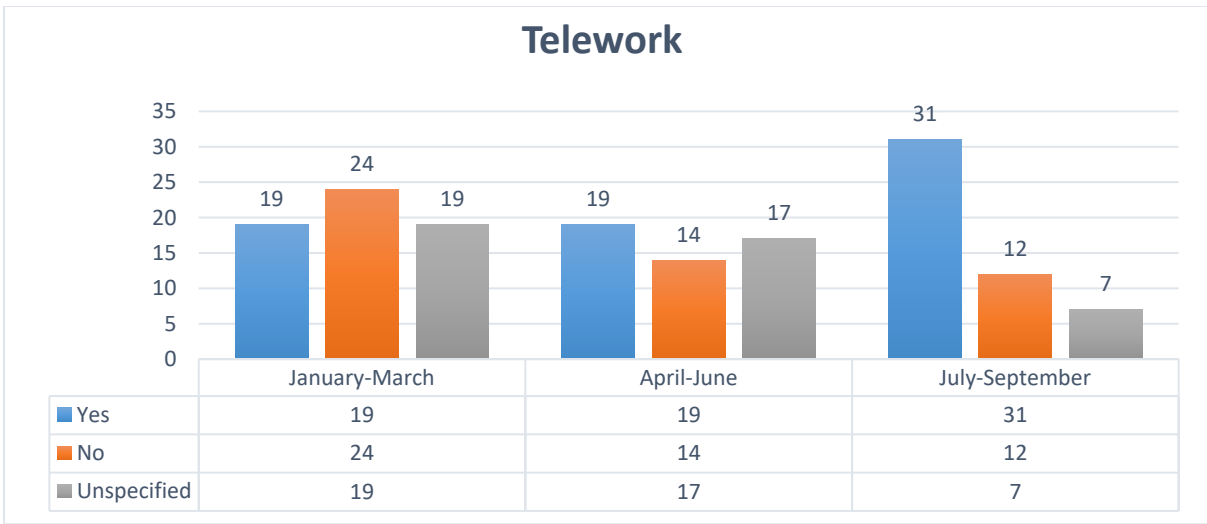


Figure 6. 17: Frequency distribution of telework

Octopus HR (2018) reports that women have to utilise leave options in order to carry out home based responsibilities.

The next section presents the third aspect under the ***Telkom Touch***, work and leave arrangements of the Telkom Touch at Telkom over nine months of 2018.

6.5. The usage of work and leave arrangements of the *Telkom Touch* at Telkom over nine months

A detailed description of the next section presents usage of the ***Telkom Touch*** work and leave arrangements at Telkom, and its related aspects over nine months, using descriptive statistics as provided in Table 6.6.

Table 6. 6: Measure of Central Tendency and Dispersion of work and leave arrangements at Telkom for nine months of 2018

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Educational Leave: Jan-Mar	50	1	2	4.63	1.70
Educational Leave: Apr-Jun	50	1	3	7.72	2.34
Educational Leave: Jul-Sept	50	1	3	6.54	2.02
Educational Leave: Jan-Mar	50	1	3	6.27	1.88
Educational Leave: Apr-Jun	50	1	3	5.79	2.54
Educational Leave: Jul-Sept	50	1	3	8.14	1.90
Family Responsibility Leave: Jan-Mar	50	1	3	8.08	1.60
Family Responsibility Leave: Apr-Jun	50	1	3	7.93	1.94
Family Responsibility Leave: Jul-Sept	50	1	3	8.19	2.32
Exceptional Leave: Jan-Mar	50	1	2	4.04	1.80
Exceptional Leave: Apr-Jun	50	1	3	9.37	2.02
Exceptional Leave: Jul-Sept	50	1	3	6.46	2.46
Medical, dental & related leave: Jan-Mar	50	1	3	7.66	2.16
Medical, dental & related leave: Apr-Jun	50	1	3	7.46	1.88
Medical, dental & related leave: Jul-Sept	50	1	3	8.86	1.70
Bereavement Leave: Jan-Mar	50	1	3	7.35	2.48
Bereavement Leave: Apr-Jun	50	1	3	8.35	2.42
Bereavement Leave: Jul-Sept	50	1	3	7.23	2.26
Valid N (list wise)	50				

A detailed statistical analysis of the results of the work and leave arrangements at Telkom, using descriptive statistics, is provided in the next section.

The work and leave arrangements at Telkom were all measured over three-month intervals over the nine months' period. The first aspect of Educational Leave is explored in the next section.

6.5.1. Educational Leave usage over nine months

The first interval, the January-March period, revealed a mean ($m=4.63$) and standard deviation ($sd.=1.70$). The mean and standard deviation showed disinclination towards Educational Leave. According to Figure 6.18, the descriptive statistics indicated fifteen respondents (30.0%) utilised the Educational Leave option, and thirty-five respondents (70.0%) did not use it. There were no unspecified respondents.

The second interval, the April-June period, revealed a mean ($m=7.72$) and standard deviation ($sd.=2.34$). The mean and standard deviation showed disinclination towards Educational Leave. For this period, under Figure 6.18, there were twenty-six unspecified respondents (52.0%) was noted, indicating an inclination towards not using the option, with fifteen

respondents (30.0%) not using the option and nine respondents (18.0%) utilising the Educational Leave option.

The third interval, the July-September period, revealed a mean ($m=6.54$) and standard deviation ($sd.=2.02$). The mean and standard deviation showed disinclination towards Educational Leave. According to Figure 6.18, twenty-nine respondents (58.0%) were noted for not using the option, while ten respondents (20.0%) utilised the Educational Leave option. For this period, the number of unspecified respondents was high twenty-nine (58.0%).

The April-June period had the highest mean, with the January-March period having the lowest. The mean score values for the three intervals are presented in descending order:

- April-June ($m=7.72$, $sd.=2.34$)
- July-September ($m=6.54$, $sd.=2.02$)
- January-March ($m=4.63$, $sd.=1.70$).

Figure 6.18 shows the frequency distribution of work of Educational Leave over nine months of 2018.

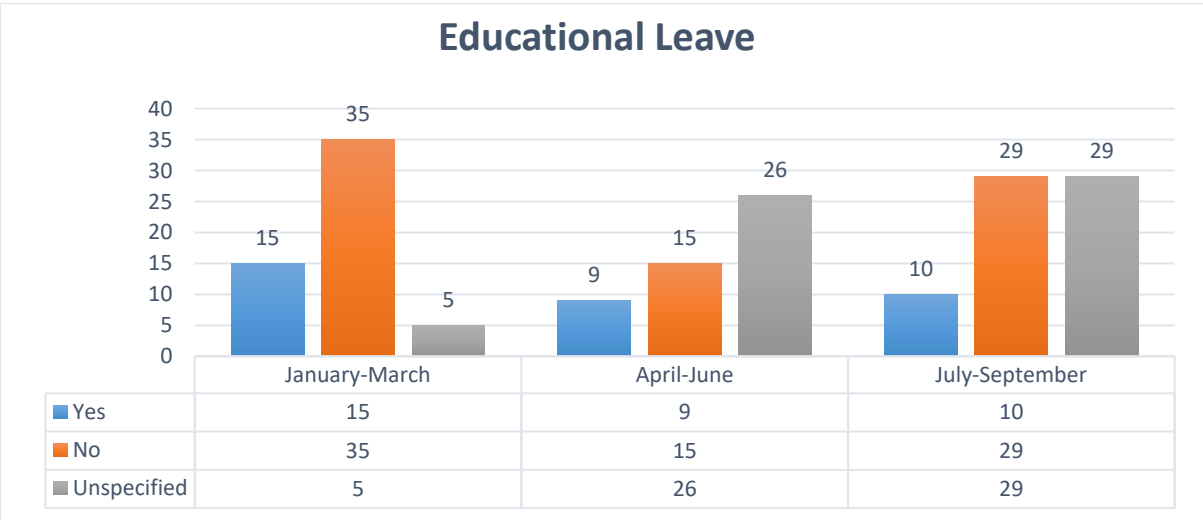


Figure 6. 18: Frequency distribution of Educational Leave

The next section looks at Family Responsibility Leave.

6.5.2. Family Responsibility Leave usage over nine months

The first interval, the January-March period, revealed a mean ($m=8.08$) and standard deviation ($sd.=1.60$). The mean and standard deviation showed an inclination towards Family Responsibility Leave. The descriptive statistics under Figure 6.18 indicated thirty respondents

(60.0%) utilised the Family Responsibility Leave option, and ten respondents (20.0%) did not use it. There were ten unspecified respondents (20.0%) for this period.

The second interval, the April-June period, revealed a mean ($m=7.93$) and standard deviation ($sd.=1.943$). The means and standard deviation showed an inclination towards Family Responsibility Leave, though there was almost equal disinclination. According to Figure 6.18, the descriptive statistics indicated nineteen respondents (38.0%) did not utilise the Family Responsibility Leave option, and seventeen respondents (34.0%) did. There were 14 unspecified respondents (28.0%) for this period.

The third interval, the July-September period, revealed a mean ($m=8.19$) and standard deviation ($sd.=3.32$). The mean and standard deviation were inclined towards Family Responsibility Leave, though there was almost equal disinclination. From Figure 6.18, the descriptive statistics indicated twelve respondents (24.0%) did not utilise the Family Responsibility Leave option, and eleven respondents (22.0%) did. There were twenty-seven unspecified respondents (54.0%) for this period.

The July-September period had the highest mean, with the January-March period having the lowest. The mean score values for the three intervals are presented in descending order:

- July-September ($m=8.19$, $sd.=2.32$)
- April-June ($m=7.93$, $sd.=1.94$)
- January-March ($m=8.08$, $sd.=1.60$).

Figure 6.19 shows the frequency distribution of Family Responsibility Leave over the nine months of 2018.

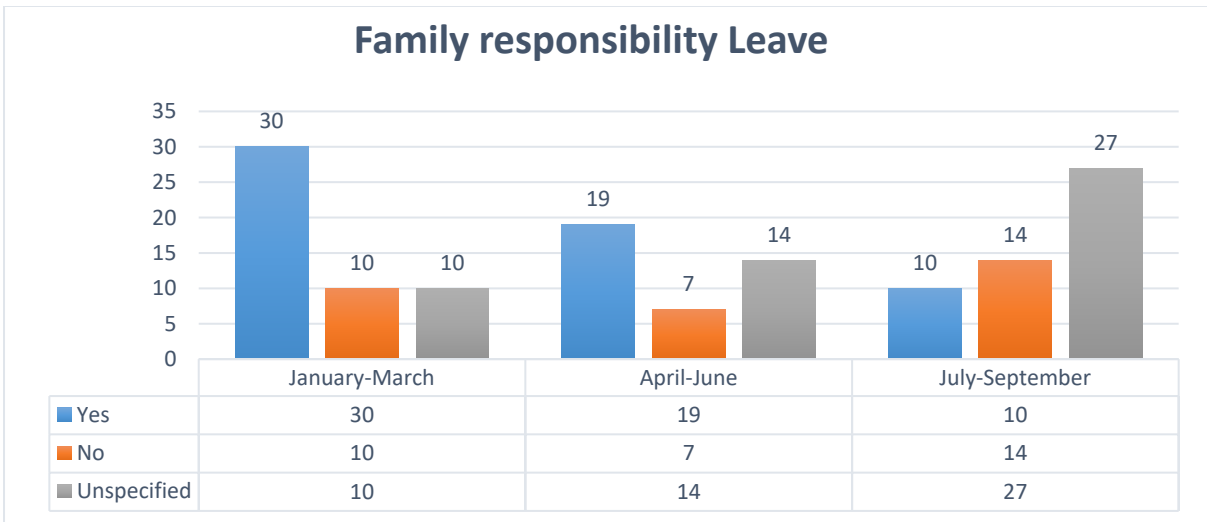


Figure 6. 19: Frequency distribution of Family Responsibility Leave

The next section looks at the Exceptional Leave option.

6.5.3. Exceptional Leave usage over nine months

The first interval, which was the January-March period, revealed a mean ($m=4.04$) and standard deviation ($sd.=1.80$). The mean and standard deviation showed disinclination towards Exceptional Leave. According to Figure 6.19, the descriptive statistics indicated ten respondents (20.0%) utilised the Exceptional Leave option, and forty respondents (80.0%) did not use it. There were no unspecified respondents for this period.

The second interval, which was the April-June period, revealed a mean ($m=9.37$) and standard deviation ($sd.=2.02$). The means and standard deviation showed an inclination towards Exceptional Leave. Under Figure 6.19, the descriptive statistics indicated that twenty-one respondents (42.0%) utilised the Exceptional Leave option, and seven respondents (14.0%) did not use it. There was a high number of twenty-two unspecified respondents (44.0%) for this period.

The third interval, which was the July-September period, revealed a mean ($m=6.42$) and standard deviation ($sd.=2.64$). The mean and standard deviation showed disinclination towards Exceptional Leave. The descriptive statistics under Figure 6.19 indicated only four respondents (8.0.0%) utilised the Exceptional Leave option, and nineteen respondents (38.0%) did not use it. There was a high number of twenty-seven unspecified respondents (54.0%) for this period. Telkom as the employer can, at its discretion, grant special leave, unpaid leave, or annual leave for Exceptional Leave.

The April-June period had the highest mean, while January-March period had the lowest. The mean score values for the three intervals are presented in descending order:

- April-June (m=9.37, sd.=2.024)
- July-September (6.42, sd.=2.46)
- January-March (m=4.04, sd.=1.80).

Figure 6.20 shows the frequency distribution of Exceptional Leave over nine months of 2018.

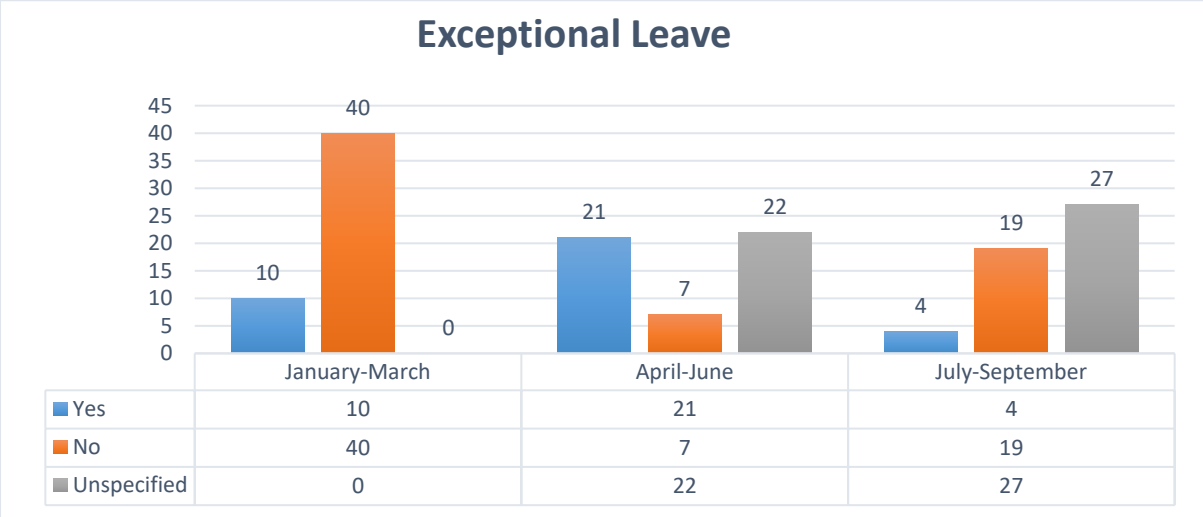


Figure 6. 20: Frequency distribution of Exceptional Leave

The next section looks at Medical, Dental and Related Leave.

6.5.4. Medical, Dental and Related Leave usage over nine months

The period January-March revealed a mean (m=7.66) and standard deviation (sd.=2.16). The mean and standard deviation showed disinclination towards Medical, Dental, and Related Leave. The descriptive statistics under Figure 6.21 indicated eleven respondents (22.0%) utilised the Medical, Dental, and Related Leave option, and twenty respondents (40.0%) did not use it. There were nineteen unspecified respondents (38.0%) for this period.

For the April-June period, a mean (m=7.46) and standard deviation (sd.=1.88) were revealed. The mean and standard deviation showed disinclination towards Medical, Dental, and Related Leave. According to Figure 6.20, the descriptive statistics indicated that seventeen respondents (34.0.0%) utilised the medical, dental, and related options, and twenty-two respondents (44.0%) did not use it. There were eleven unspecified respondents (64.0%) for this period.

The period July-September revealed a mean (m=8.86) and standard deviation (sd.=1.70). The mean and standard deviation showed an inclination towards Medical, Dental, and Related

Leave. As per Figure 6.20, the descriptive statistics indicated that twenty-nine respondents (58.0%) utilised the Medical, Dental, and Related Leave option, and only seven respondents (14.0%) did not use it. There were fourteen unspecified respondents (28.0%) for this period. The high number of people who utilised the medical, dental, and other related leave options for the July to September period could be explained by considering that the interval coincided with the influenza peak season’s annual high infections period, which starts in May-June to August-September.

The July-September period had the highest mean, while April-June period had the lowest. The mean score values for the three intervals are presented in descending order:

- January-March (m=7.66, sd.=2.16)
- July-September (m=8.86, sd.=1.70)
- April-June (m=7.46, sd.=1.88).

Figure 6.21 shows the frequency distribution of Medical, Dental, and Related Leave over the nine months of 2018.

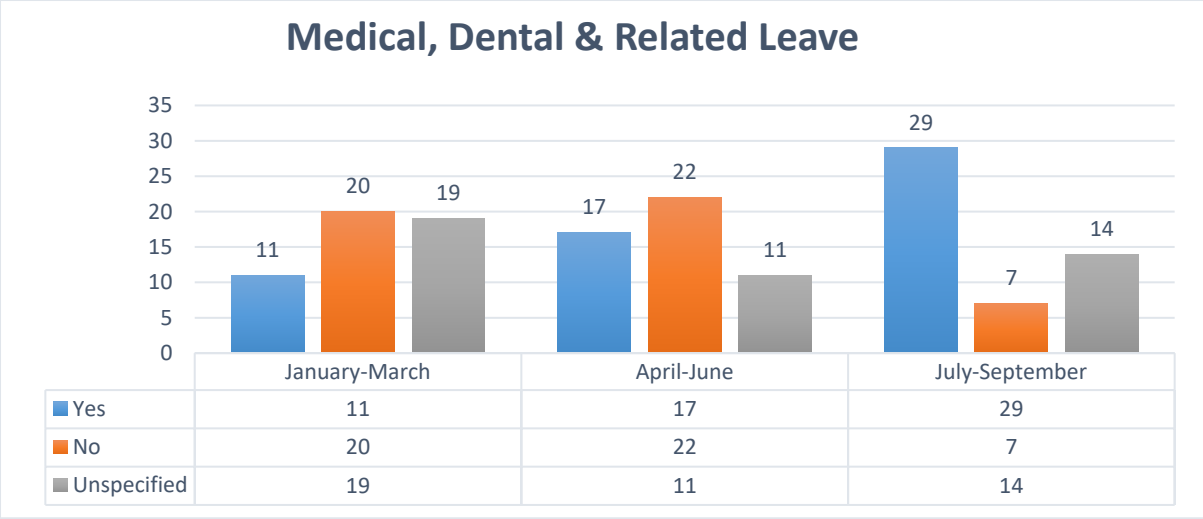


Figure 6. 21: Frequency distribution of Medical, Dental and Related Leave

The next section looks at Bereavement Leave.

6.5.5. Bereavement Leave usage over nine months

The period January-March revealed a mean (m=7.35) and standard deviation (sd.=2.48). The mean and standard deviation showed disinclination towards Bereavement Leave. According to Figure 6.21, the descriptive statistics indicated seven respondents (14.0%) utilised the

Bereavement Leave option, and twelve respondents (24.0%) did not use it. There were thirty-one unspecified respondents (14.0%) for this period.

For the April-June period, a mean ($m=8.35$) and standard deviation ($sd.=2.48$) were revealed. The mean and standard deviation showed disinclination towards Bereavement Leave. According to Figure 6.21, the descriptive statistics indicated eleven respondents (22.0.0%) utilised the Bereavement Leave option, and seven respondents (14.0%) did not use it. There was a high number of thirty-two (64.0%) of unspecified respondents for this period.

The period July-September revealed a mean ($m=7.23$) and standard deviation ($sd.= 2.26$). The mean and standard deviation showed disinclination towards Bereavement Leave. The descriptive statistics under Figure 6.21 indicated eight respondents (16.0%) utilised the Bereavement Leave option, and twenty-one respondents (24.0%) did not use it. There were twenty-one unspecified respondents (42.0%) for this period.

The April-June period had the highest mean, with the July-September period having the lowest. The mean score values for the three intervals are presented in descending order:

- April-June ($m=8.35$, $sd.=2.48$)
- January-March ($m=7.66$, $sd.=2.48$)
- July-September ($m=7.23$, $sd.=2.26$).

Figure 6.22 shows the frequency distribution of Bereavement Leave over the nine months of 2018.

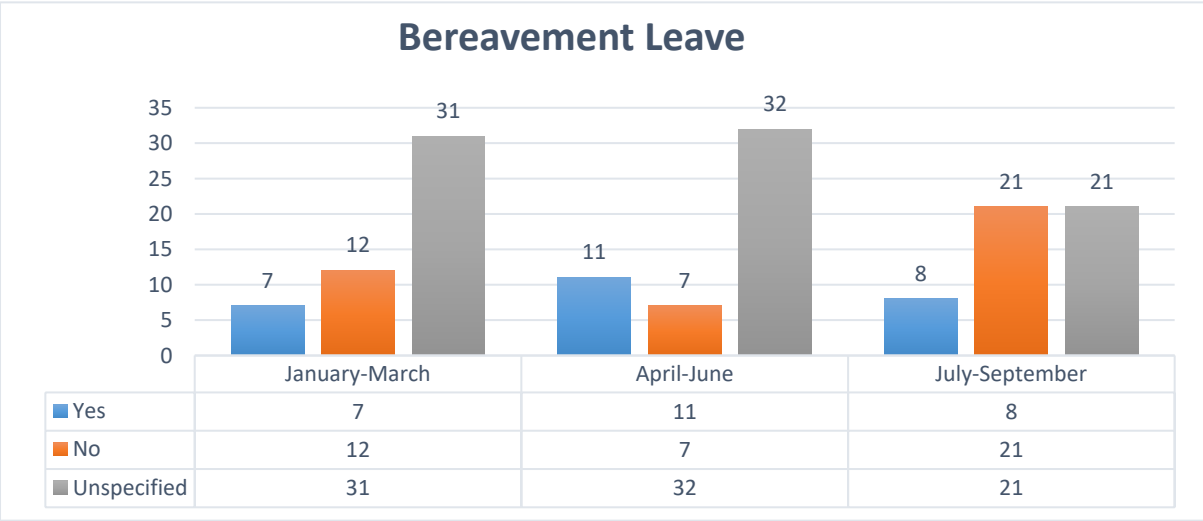


Figure 6. 22: Frequency distribution of Bereavement Leave

This next section presents a statistical analysis of the second aspect under the ***Telkom Touch***, which is Telkom's work practices.

6.6. Conclusion

This chapter has presented Stage 1: Secondary data collection, namely; Aim 1 and objectives 1. In this chapter, the Telkom policy and programme usage, which are the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the Telkom Touch, were presented.

The next chapter (7) presents Stage 2, the quantitative data collection for the study.

Chapter 7

Stage 2: Quantitative data collection

7.1. Introduction

This chapter focuses on the second stage of the current study. The purpose of the second phase of the study was to explore the work-life balance experiences of female ICT professionals in a telecommunications organisation. Research objectives (2 and 3) outlined the aim in detail, focusing on the extent to which all employees should be aware of policies and programmes in place that are designed to address work-life balance and the challenges female ICT professionals face in combining work and family life at Telkom.

This chapter presents the results of the findings for the quantitative data collection stage under Aim 2 and objectives 2 and 3.

- Aim 2

To investigate the work-life balance experiences of female ICT professionals in a telecommunications organisation.

- Objective 2

To evaluate the extent to which all employees are aware of policies and programmes that are in place, which address work-life balance at the telecommunications company.

- Objective 3

To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company.

7.2. Response rate

The Telkom Human Resource Information System (HRIS) database which holds the personnel records of all staff members at Telkom, was used as a sample frame. The Information Communications and Technology Department had a total number of 57 female ICT professionals. The employees were drawn from the Information and Communications Technology, Information Technology, and Auxiliary services, and included the following; Operations Specialists, Senior Data Management Managers, Junior ICT Technicians, Systems Technicians, ICT Technicians, and Data Base Network Administrators. Using the Raosoft (2004) sample calculator, a sample size of $n = 50$ was drawn from the population, calculated at

a 95% confidence level. It was assumed that there would be a 50% response rate given the excellent relationship the researcher had with the respondents. This was also made possible by the researcher employing a data collection method of on-line self- administering of the questionnaire to the respondents and doing follow up visits to collect and remind the respondents to complete the questionnaires. The Raosoft (2004) formula is shown in the next section. In the equation where n is the sample size, N is the population size, and e is the level of meticulousness.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{57}{1 + 57(0.05)^2}$$

$$\underline{n = 50}$$

Fifty questionnaires were sent out, and 50 respondents participated in the on-line survey, satisfying the number 50 of respondents as set out by the Raosoft (2004) sample calculator, thus representing a 100% response rate.

7.4. Instrument development of the on-line web based *Google™ Drive Forms* Survey

To achieve objectives 2 and 3, the study involved developing an online web-based *Google™ Drive Forms* Survey called the “*Work-Life Balance Study Employee Survey.*” The steps undertaken in this evolutionary process are described in the next section.

7.4.1. Item generation

Appendix D of this thesis describes the designed items after an extensive review of female ICT professionals’ experiences and telecommunications literature. The statements were designed to obtain rich responses from the respondents’ answers in an online survey format, and imported into the Statistical Package for Social Sciences version 26 (SPSS) which consisted of:

Section A: Demographic data (9 items)

Section B: Work-related questions (8 items that covered work-life balance, gender stereotypes and flexibility)

Section C: Life-related questions (12 items that covered dependent adults /children-related tasks, work/home interference, time management, sense of accomplishment and skills acquisition).

7.4.2. Pilot study

The pilot study was conducted on a small group of eight female ICT professionals from an organisation called Midlands Communications in Pietermaritzburg, KwaZulu-Natal, who did not form part of the final study utilising the same protocols and procedures as those applied in the actual fieldwork. The survey was also sent to experts at the University of Venda and Nelson Mandela University to ascertain that the questions characterised the problems they intended to measure.

The pilot study highlighted the following concerns, which influenced the final version of the questions:

- Grammar of statements;
- Length of some statements was confusing because they were viewed as not being concise or to the point;
- Use of language in some statements was not easy enough to understand;
- Pre-conceived answers were generated, based on the subcategories, before actual statements were read.

7.4.3. Expert content analysis

The design process involved circulating the survey to experts and colleagues in research methodology at the University of Venda and Nelson Mandela University. The following suggestions for improvements were made:

- Structure the questions concisely to avoid confusion. Some questions asked two or three things at once.
- Pre-code the questions before analysis as this would save you time later. This makes the analysis process easier as the researcher will know where each question falls under.
- The term ‘questionnaire’ should be replaced with ‘survey.’
- Remove item number 3: *What department are you in?* as that is already covered in the demographics section.
- Remove item number 4: *What is your job title?* Rather create a separate table so that the section is not too cluttered.
- Remove item number 5: *What location do you work at?* This is already established as the City of Pretoria.

A questionnaire served as the primary survey instrument in this study, so establishing its reliability, validity, error rate, and ease of use was essential. The research goals and objectives were noted, and the survey instrument was designed after confirming that it met the goals of

the study (Neuman, 2014), with extensive research supporting the use of Life Course Perspective (Giele & Elder, 1998) and Border Theory (Clark, 2000). Moreover, the development of survey instruments and identifying the study's target respondents, who were female engineers, were equally important.

The next section looks at the results from the analysis of the psychometric properties of reliability and validity, of the on-line web-based *Google™ Drive Forms* Survey called, “*Work-Life Balance Study Employee Survey*.”

7.4.4. Psychometric analysis

The on-line survey was sent to a Statistician in the second week of the month of September, 2018. On the 18th September, 2018, the results of the psychometric properties. The psychometric properties of the on-line web-based *Google™ Drive Forms* called, “*Work-Life Balance Study Employee Survey*” was established using Cronbach’s alpha and the Factor Analysis. To improve the survey’s internal consistency and construct validity, numerous changes needed to be made, and they are discussed in the next section. The following sub-scales were affected: Section A: Demographics and Section B: Work-related questions.

Table 7. 1: Original factors and their pre-coded items on demographics

Section A: Demographics scale	
Factors	Original items
Demographics	1/2/3/4/5/6/7/8/9/10/11/12/13

After running inter-item reliability tests, it was found that items 5 and 6 exhibited poor reliability. Once these items were removed the remainder of the items, that is 1, 2, 3, 7, 8, 9,10,11 and 12 were left.

7.4.4.1. Section A: Demographics

Table 7.2 shows the original statements for components on demographics

Table 7. 2: Original statements for components on demographics

Section A: Demographics scale	
Demographics	1. Age group
	2. Racial grouping
	3. ICT department
	4. Position
	5. Income level
	6. Home ownership
	7. Educational level
	8. Marital Status
	9. Number of years worked for in the organisation
	10. Partner/ spouse’s employment status if any
	11. Hours spent on work-related issues per week
	12. Hours per week physically spent at work

7.4.4.3. Section B: Work-related scale

After running inter-item reliability tests, all items on this sub-scale except for one were reliable. Therefore, these items would be used in further statistical analysis of the results of the questionnaires.

Table 7. 3: Original factors and their pre-coded items on the work-related scale

Section B: Work-related questions	
Factors	Original Items
Work-life balance	1.1/1.2/1.3/1.4/1.5/1.6
Gender stereotypes	1.7/1.8/1.9
Flexibility	1.10/1.11/1.12
Time management	1.13/1.14/1.15

During Factor Analysis, the component, time management, was removed as the statement loaded more significantly on the flexibility component.

The item of time management needed to be removed from this scale to improve reliability. Therefore, going forward, the components of the work-related scale consisted of the items listed in Table 7.4.

Table 7. 4: Original statements for the items of the work-related scale

Section B: Work-related scale	
Factors	Original Items
Work-life balance (Awareness)	1.1. If a work-life balance policy exists, are the employees are expected to adhere to and sign the policy? 1.2. Do you use any of the family-friendly benefits available through your organisation? 1.3. Policy communication in the organisation a work-life balance policy has been established documented and well communicated. 1.4. . Do you feel that your work/ career interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare? 1.5. How often do you use unique programmes that are offered by the organisation? 1.6. How often do you utilise a specific work-life balance policy has been established documented?
Gender stereotypes	1.7. Do you feel treated fairly as a female ICT professional in the workplace given you are operating in a male-dominated industry? 1.8. Do you experience discrimination in the work-place? 1.9. Do you feel you are given less tasks because you are a female?
Flexibility	1.10. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry? 1.11. Do you think as a woman you are given the same tasks as your male counterparts? 1.12. Do you feel flexible work arrangements negatively affect chances for promotion?
Time management	1.13. Do you feel you are afforded enough time to do your work? 1.14. Are you able to manage your time and achieve work-related task achievement activities? 1.15. Does time a challenge or opportunity in your work in terms of time?

7.4.4.4. Section C: Life-related scale

All items on this subscale were reliable, except Questions 1.8 on gender stereotypes, 1.11 on flexibility, and 1.14 and 1.15 on time management. Therefore, all these items were removed. The remaining items could be used in the further statistical analysis of the results of the questionnaire.

Table 7. 5: Original factors and their pre-coded items on the life-related scale

Section C: Life-related scale	
Factors	Original Items
Dependent adults /children-related tasks	2.1. Do you care for dependent adults/children? 2.2. Do you feel you spend enough time taking care of dependent adults/children? 2.3. Do you feel that your work/ career interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare? 2.4. Do you feel that your work/ career keeps you from spending the amount of time that you would like to spend with your family? 2.5. Do you feel that your work/ career interferes with your home life?
Time management	2.6. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry? 2.7. Do you feel you manage your time effectively and efficiently? 2.8. Do you as a female ICT professional feel you balance your life between work and domestic chores?
Sense of accomplishment	2.9. Do you feel that your work/ career provides you with a sense of accomplishment and this helps me be a better friend or family member? 2.10. What makes you feel you cannot be a better friend and family member through your work/career? 2.11. Do you feel your sense of accomplishment is related to your work-life balance?
Skills acquisition	2.12. Do you feel your work/ career helps you acquire skills, and this helps you be a better friend or family member? 2.13. Do you feel your work/ career does not help you acquire skills, which help you be a better friend and family member? 2.14. Do you feel your skills acquisition aids you in work-life balance?

7.5. Reliability and validity

Once the instrument’s internal consistency and construct validity was established, psychometric analysis of the questionnaire followed. All items on this subscale were reliable, except Questions 2.11 on sense of accomplishment and Question 2.14 on skills acquisition. Therefore, all these items were removed. The remaining items could be used in the further statistical analysis of the results of the questionnaire.

7.5.1. The Work-related scale

The Work-related scale consisted of components that examined the female ICT professionals’ perceptions of Telkom’s work-related activities. The reliability of the components used in the Work-related scale is shown in Table 7.6.

Table 7. 6: Reliability statistics for the work-related scale

Cronbach alpha	Cronbach's Alpha Based on Standardized Items	No of items
Overall	.734	6
Work-life balance	.773	2
Gender stereotypes	.714	1
Flexibility	.702	1

In this research study, the reliability of the Work-related scale was established by evaluating the inter-item consistency, using Cronbach's alpha test. According to Sekaran and Bougie (2010:289), “the closer to 1 Cronbach's coefficient alpha is, the higher the internal consistency reliability.”

According to authors, Cooper and Schindler (2003), to ensure that a measure is reliable, a Cronbach alpha value of above 0.5 is acceptable.

Reliability coefficient (alpha) ranged from 0 to 1, with 0 representing an instrument with many errors, and 1 representing the total absence of errors. A reliability coefficient (alpha) of 0.70 or higher is considered acceptable reliability (Tavakol & Dennick, 2011). Table 6.6 shows that the Alpha coefficient ranges from .702 to .773. As indicated in the table above, the overall study's reliability score was 0.734, which indicates that it is higher than the reliability coefficient of 0.50. This means that the results obtained from this study are deemed reliable. The validity (Factor Analysis) results for the items comprising the Work-related scale are shown in Table 7.7.

Table 7. 7: Factor analysis results of the Work-related scale using KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.728
Bartlett's Test of Sphericity	Approx. Chi-Square	705.870
	Df	28
	Sig.	.000

According to Hair, Anderson, Tatham, and Black (2010:67), “the KMO Measure of Sampling Adequacy (MSA) must be 0.60 or higher to be acceptable”. Table 6.7 shows that the MSA is 0.728, Bartlett's Test is significant, indicating that the data set complied with the requirements of sampling adequacy and sphericity, for Factor Analysis to be performed.

The Principle Component Analysis extracted three (3) components (Factors), listed in Table 7.8, and a Varimax Rotation was conducted to make the components (Factors) interpretable. The results are shown in Table 7.8.

Table 7. 8: Rotated Component Matrix for the Work-related scale

	Component		
	1	2	3
QUES1	.728		
QUES2	.521		
QUES3	.614		
QUES4	.799		
QUES5		.969	
QUES6		.590	
QUES7			.733
QUES8			.542

Component 1 (QUES1, QUES2, QUES3, and QUES4) can be labeled **Work-Related aspects**; it deals with the female ICT professional’s view on work-life balance, the family-friendly benefits available, the way the work-life balance policy is communicated in the organisation, and the way work interferes with life responsibilities.

Component 2 (QUES5 and QUES6) can be labeled as **Gender Stereotypes**; it deals with how female ICT professionals are treated and their tasks by virtue of being females.

Component 3 (QUES7 and QUES8) can be labeled as **Flexibility**; it deals with opportunities given to be flexible, and the negative aspects of Flexibility in terms of promotion.

The next section looks at the Life-related scale.

7.5.2. The Life-related scale

The reliability for the Life-related scale is shown in Table 7.9.

Table 7. 9: Reliability statistics for the Life-related scale

Cronbach alpha	Cronbach's Alpha Based on Standardized Items	No of items
Overall	.745	12
Dependent adults /children-related tasks	.814	3
Work/home interference	.711	2
Time management	.702	3
Sense of accomplishment	.571	2
Skills acquisition	.594	2

As stated from the previous section, when dealing with the reliability of the Work-related scale, the closer to 1 Cronbach's coefficient alpha is, the higher the internal consistency reliability. Table 6.9 shows that the Alpha coefficient ranges from .571 to .814. Neuman (2000) stated that “reliability coefficients of less than 0.50 are unacceptable, while those between 0.50 and 0.60 are regarded as significant and those above 0.70 as acceptable”. Various authors differ on the interpretation of acceptable or significant results in terms of reliability; however, overall, the Life-related scale items have a Cronbach's alpha value of .745, indicating an acceptable to good inter-item reliability for the overall scale.

The validity (Factor Analysis) results for the items comprising the Life-related scale are shown in Table 7.10 and 7.11.

Table 7. 10: Factor Analysis results of the Work-related scale KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.607
Bartlett's Test of Sphericity	Approx. Chi-Square	190.540
	Df	28
	Sig.	.000

According to Hair, Anderson, Tatham, and Black (2010:67), “the KMO Measure of Sampling Adequacy (MSA) must be 0.60 or higher to be acceptable”. Table 6.10 shows that the MSA is 0.697, Bartlett's Test is significant, indicating that the data set complies with the requirements of sampling adequacy, and sphericity for Factor Analysis to be performed.

The Principle Component Analysis extracted five (5) components (Factors), listed Table 6.11, and a Varimax Rotation was conducted to make the components (Factors) interpretable. The results are shown in Table 7.11.

Table 7. 11: Rotated Component Matrix for the Life-related scale

	Component				
	1	2	3	4	5
QUES2.1	.502				
QUES2.2	.225				
QUES2.3		.708			
QUES2.4		.643			
QUES2.5		.603			
QUES2.6			.508		
QUES2.7			.706		
QUES2.8			.086		
QUES2.9				.825	
QUES2.10				.092	
QUES2.11					.423
QUES2.12					.577

Component 1 (QUES2.1 and QUES2.2 can be labeled **Dependent adults /children-related** tasks; it deals with the female ICT professional’s view on Life balance in terms of how they care for dependents, if the time they spend with the dependents is enough.

Component 2 (QUES2.3, QUES2.4, and QUES2.5) can be labeled as **Work/home Interference**; it deals with how female ICT professionals perceive work as interfering with home life activities, time spent away from family because of work, and work interfering with life.

Component 3 (QUES2.6, QUES2.7, and QUES2.8) can be labeled as **Time management**; it deals with opportunities given to be flexible as a female, effective time management, and balancing work and home life.

Component 4 (QUES2.9 and QUES2.10) can be labeled as **Sense of Accomplishment**; it deals with the way female ICT professionals view the industry as affording them a sense of accomplishment for better human relations be it, friends and family.

Component 5 (QUES2.11 and QUES2.12) can be labeled as **Skills Acquisition**; it deals with career skills acquisition, that helps the female ICT professionals to have better family/friendships relationships.

The various components identified in these scales, namely the Work-related scale and the Life-related scale, were statistically sound and used to conduct other statistical analyses. In the next section, the descriptive statistics used to analyse the data gathered by the questionnaire are presented.

7.6. Descriptive statistics

Frequencies and percentages were used to ascertain the characteristics of the sample. This was followed by the interpretations of the overall responses to the dimensions of the scales used in this study. The mean and standard deviations were used for this.

7.6.1 Demographic profile of the female ICT professional respondents

In this section, the demographic profile of the sample group of female ICT professionals is presented. Frequencies and percentages were used to ascertain the characteristics of the sample. This was followed by the interpretations of the overall responses to the dimensions of the scales used in this study. Mean and standard deviations measures were used for this.

In this section, the demographic profile of the sample group of female ICT professionals is presented.

7.6.1.1. Age of female ICT professional respondents

The sample population of this study was 50 female ICT professionals. As shown in Table 6.12, most of the sample (40%) fell into the age group 20-25, followed by the 26-30-35 group (18%), then 31-35 group (14%). Only one respondent fell into the 60+ age group. It was interesting to note that most of the sample respondents were between the ages of 20-25 years old. This implied that these respondents were young adults just entering the job market.

Table 7. 12: Age of the female ICT professional respondents

BIOGRAPHICAL VARIABLE	CATEGORY	FREQUENCY	PERCENTAGE
Age group	20- 25	20	40%
	26-30	9	18%
	31-35	7	14%
	36-40	3	6%
	41-50	4	8%
	51-55	4	8%
	56-60	2	4%
	60 +	1	2%

For statistical analysis, the final questionnaire was rearranged into the scale as follows: 20-30 years, 31-40 years, 41-50 years, 51 or more (See the final survey in Appendix D). The next section looks at the racial distribution for the current study.

7.6.1.2. Race of female ICT professional respondents

The racial distribution was categorised three racial groupings. Figure 7.1. shows that many of the respondents were Black, a total of thirty-nine (39) comprising 78% of the respondents. This presented an interesting aspect, how race shaped the responses based on the different racial views of work-life balance. Eight (8) comprising 16% were White, and three (3) comprising 6% were Mixed-race respondents.

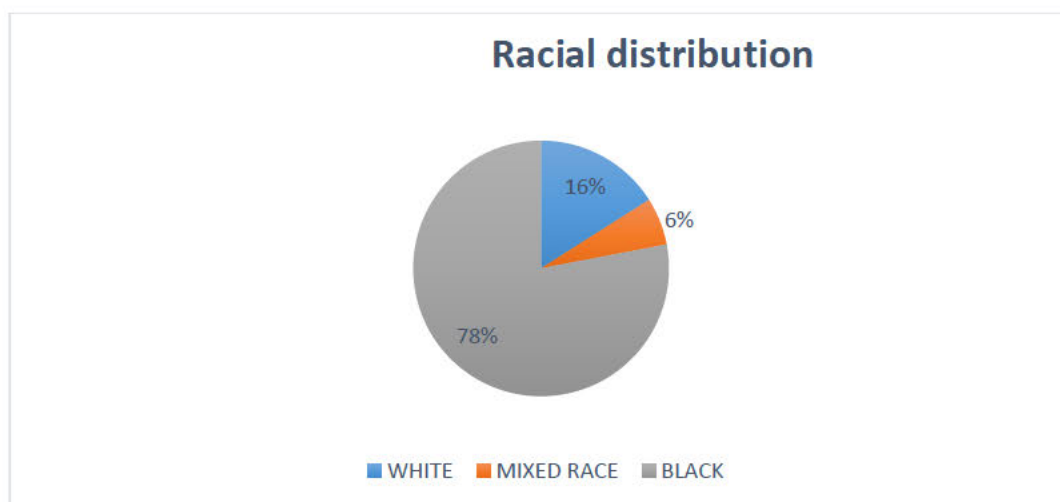


Figure 7. 1: Distribution of female ICT professionals in the sample according to race

The next section looks at the marital status of the female ICT professionals.

7.6.1.3. Marital status of female ICT professional respondents

Figure 7.2. shows that 21 respondents (42%) were single and represented the majority of the sample. It is likely that this influenced the study's findings, especially with answers to questions related to spouses/partners and children.

The highest number comprised 21 single respondents (42%), and those cohabiting (not married) constituted 11 respondents (22%), respectively, while the lowest distribution was two divorced respondents (4%).

Move figure up

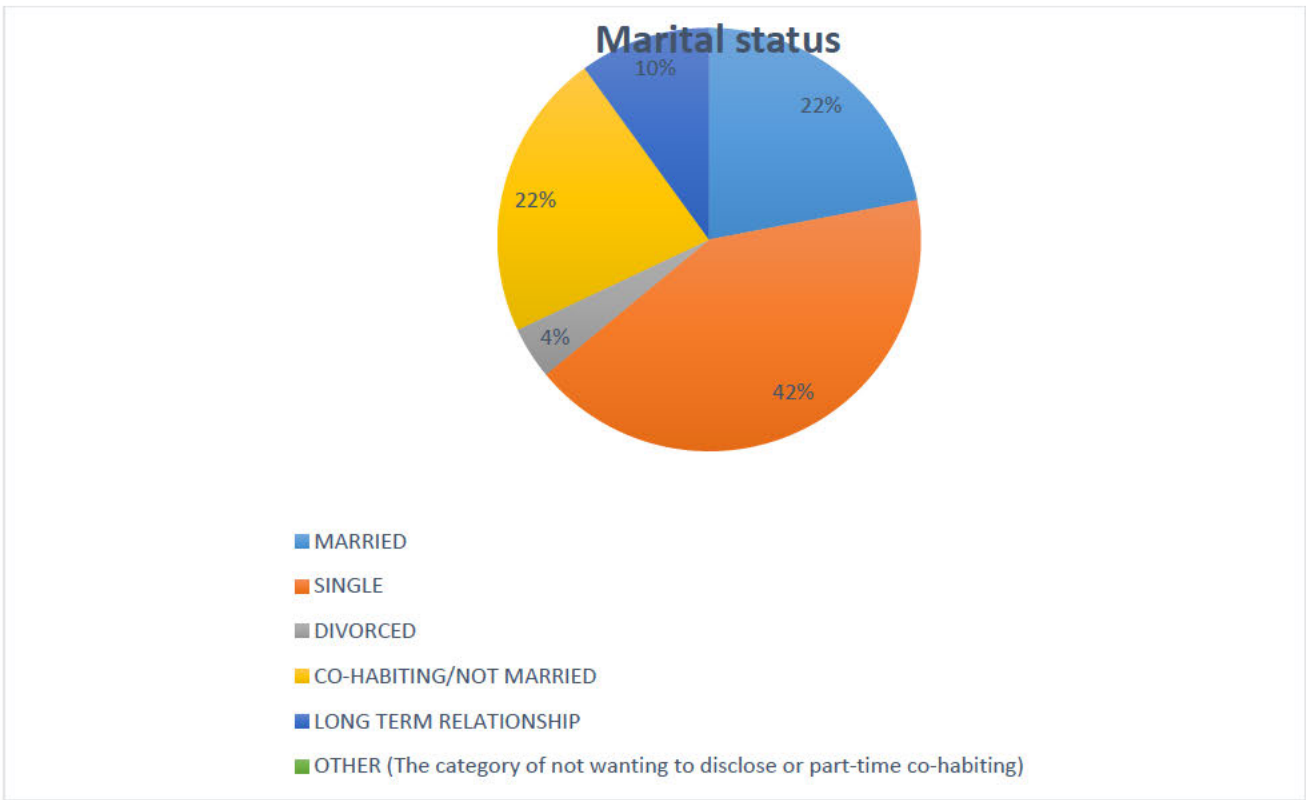


Figure 7. 2: Distribution of female ICT professionals in the sample according to marital status

The next section looks at the spouse/partners’ employment status. A spouse/partner’s employment status helped understand how, for example, home chores were distributed between spouses/partners.

7.6.1.4. Spouse/ partner’s employment status

Figure 7.3 shows the employment status of the female ICT professional’s spouse/ partner. As stated earlier, collecting this information helped the researcher understand how, for example, home chores and roles were distributed between spouses/partners. The female ICT professionals with spouses/partners in full-time employment were 24 respondents (48%), which represented the majority. This provided for good comparison of responses with other groups. Some respondent declined to disclose their marital statuses comprised of 4 respondents (8%), respectively, the minority for the sample.

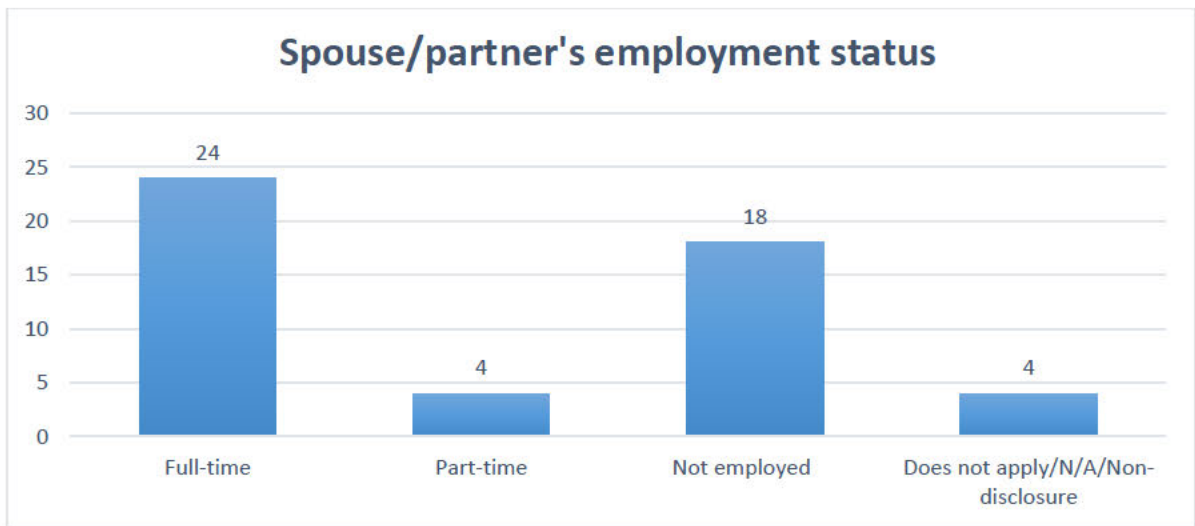


Figure 7. 3: Distribution of spouse/partner’s in the sample according to employment status

The next section looks at the educational level of the female ICT professionals at Telkom. Educational level was collected to ascertain the respondents’ job levels and their career prospects.

7.6.1.5. Educational level

In terms of the respondents’ academic qualifications, most of the respondents (46%) fell into the group of individuals with job-related skills, they indicated that they held Postgraduate degrees, 19% had Undergraduate degrees. The minority of the respondents (8%) had Diplomas, implying a more technical or trade-based focus of skills, as shown in Table 7.13.

Table 7. 13: Distribution of highest academic qualifications of female ICT professional respondents

BIOGRAPHICAL VARIABLE	QUALIFICATION	N	%
Educational level	Diploma	8	16%
	Degree	19	34%
	Post graduate degree	24	46%

The next section looks at the departments under which the female ICT professionals worked.

7.6.1.6. Work departments

All the respondents worked under the department of Information and Communications Technology (ICT). The respondents indicated their Departmental sections as Information and Communications Technology ICT, Information Technology (IT) and Information and Communications Technology (ICT) auxiliary services.

ICT covers all forms of computers, networks, information, and other IT products, focuses on all forms of communication, including telephony, mobiles, wireless networks, middleware (hardware and software), other enterprise software, audiovisual systems that enable movement and manipulation of data.

Information and Communications Technology (ICT) is an umbrella term which encompasses all rapidly emerging, evolving, and converging computer, software, networking, telecommunications, internet, programming, and information systems technologies. The Information and Communications Technology (ICT) auxiliary services section, for this study, respondents were the ICT senior managers who offered support to the ICT personnel.

There were 33 respondents from Information and Communications Technology (ICT), making up 66% of the population, representing the majority of the sample. There were 9 Information Technology (IT) respondents making up 18% of the population. Finally, there were 8 Information and Communications Technology (ICT) auxiliary services making up 16% of the population, which was the minority. The largest proportion of the employees was under the ICT section, which is the larger ‘umbrella’ covering all technological aspects under which IT and the auxiliary services fall under. Figure 7.4 shows the departments under which the female ICT professionals worked.

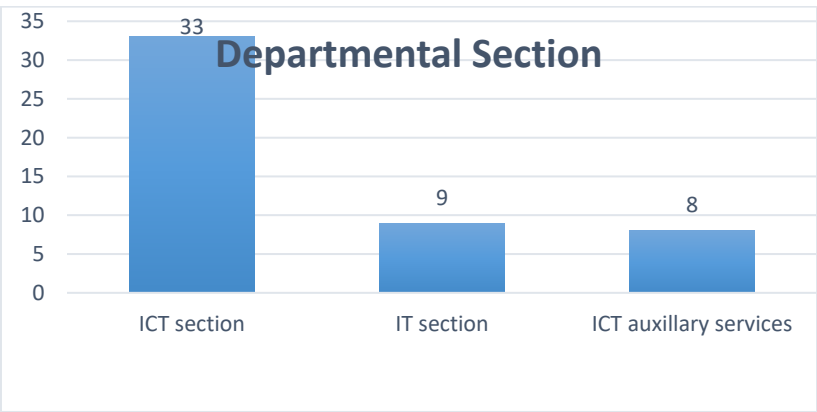


Figure 7. 4: Female ICT professionals’ distribution according to Departments

The next section looks at the length of career for female Information and Communications Technology (ICT) professional respondents.

7.6.1.7. Length of Information Communication and Technology career

According to Table 7.14, the respondents who comprised the majority of the organisation’s population for 2 to 5 years were eighteen (18), comprising 36%. The minority of the respondents worked for the organisation for 6 to 10 years, these were four (4) comprising 8% of the population. As noted from the sample age distribution (see Table 6.12), most of the respondents were young adults who had just entered the workplace. This explains why as per Table 7.14 employees with 2-5 years’ long careers with Telkom were in the majority at 18 respondents and followed by six months.

Table 7. 14: Distribution of female Information and Communications Technology professionals’ career

BIOGRAPHICAL VARIABLE	PERIOD	N	%
Length of Information Communication and Technology career	Less than 6 months	6	12%
	6 months -1 year	16	32%
	2-5 years	18	36%
	6-10 years	4	8%
	11-20 years	6	12%

The next section looks at the length of working hours for the female ICT professionals.

7.6.1.8. Length of working hours

Table 7.15 represents the length of hours per week that the respondents spent on all work-related activities. Eighteen (18) comprising of 36% of the respondents spent 40 hours per week. Seventeen (17) comprising 34% of the respondents stated 40 to 50 hours. Thirteen (13) comprises 26% of the respondents spent 51 to 60 hours, and 2 constituting 4% of the respondents stated 70 hours and over. Most of the employees observed a 40-hour workweek.

Table 7. 15: Distribution of length of working hours for female ICT professional residents

BIOGRAPHICAL VARIABLE	HOURS	N	%
Working hours	40 hours/ week	18	36%
	40 to 50 hours/ week	17	34%
	51 to 60 hours/ week	13	26%
	70 hours and over/ week	2	4%

In terms of legislation, the workweek, according to the Basic Conditions of Employment Act (1997), shortened the 46 hours to 45 hours’ workweek in 1997 to move towards a 40-hour

workweek in which Telkom employees were utilising quite well. Given the nature of the ICT environment, some employees had to work overtime to carry out maintenance and general running of the infrastructure at Telkom.

The next section looks at the distribution of the number of children under 18 years, for female ICT professionals.

7.6.1.9. Children under the age of 18

Respondents with children under 18 years at home where 24 representing 48%, and those who had no children under the age of 18 living at home were 26 signifying 52% of the population. The majority of the respondents did not have any children under the age of 18, and the difference with those with children under the age of 18 was 2%. This differential was good for this study, as both scenarios could be closely observed to determine how the aspect of having or not having children under the age of 18 affected the respondents’ work-life balance.

Table 7.16 shows the distribution of the number of children of female ICT professional respondents <18 years old.

Table 7. 16: Distribution of number of children of female ICT professional respondents <18 years old

BIOGRAPHICAL VARIABLE	Response	N	%
Number of children <18 living at home	Yes	24	48%
	No	26	52%

The next section looks at the job profiles of the female ICT respondents.

7.6.1.10. Job profiles of respondents

The female ICT professionals hold different jobs at Telkom and Table 7.17 depicts the job profiles.

Table 7. 17: Distribution of job profiles held by female ICT professional respondents

Job profiles	Frequency	Percentage
Operations specialists	10	20%
Senior data management managers	5	10%
Junior ICT Technicians	5	10%
Systems technicians	10	20%
ICT Technicians	10	20%
Data base network administrators	10	20%
Total	50	100%

The distribution of job profiles for the current sample illustrates that Operations Specialists, Systems Technicians, ICT Technicians, and Data Base Network Administrators were each composed of 10 respondents (20%), whereas Senior Data Management managers and Junior ICT Technicians each consisted of 5 respondents (10%). These results illustrated that there were fewer females at senior management levels given the low number of 5 respondents. The low number of females at the senior management level gave the results a limited understanding of female work-life balance experiences.

This concludes the description of the demographic profile of the sample of the study.

In the next section, the results of exploring the research objectives of this stage of the study, using descriptive statistics, are presented.

7.7. Results of Findings: Descriptive Statistics

Descriptive statistics, using Measures of Central Tendency and Dispersion, were used to gather the results of findings for the following research objectives:

- 2. To evaluate the extent to which all employees are aware of policies and programmes in place, which are formulated to address work-life balance at the telecommunications company.
- 3. To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company.

7.7.1. Objective 2: To evaluate the extent to which all employees are aware of policies and programmes that are in place which address work-life balance at the telecommunications company

This section looks at objective two, which was to evaluate the extent to which all employees are aware of policies and programmes currently in place, that are formulated to address work-

life balance at the telecommunications company. For this objective, Section B of the self-developed work-life balance scale is used, and it deals with the awareness of policies and programmes that are in place which address work-life balance at Telkom is utilised.

Table 7. 18: The Work-life balance factors used for the awareness of Telkom’s work-life balance policy

Section B: Work-related scale	
Factor (s)	Items
Work-life balance (Awareness)	1.1. If a work-life balance policy exists, are the employees are expected to adhere to and sign the policy?
	1.2. Do you use any of the family-friendly benefits available through your organisation?
	1.3. Policy communication in the organisation a work-life balance policy has been established documented and well communicated.
	1.4. Do you feel knowledge of the work-life balance policy interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare?

The work-life balance scale asked respondents whether they were aware of the work-life balance benefits available through Telkom, to which all 50 indicated awareness. The questions, as indicated in Table 7.18 of the scale, asked the respondents questions 1.10-1.13 on a 5-point Likert scale that used (1) to indicate ‘*Always*’ and (5) to indicate ‘*Never*.’ Table 7.19 shows the measure of central tendency and dispersion for the awareness of work-life policies.

Table 7. 19: Measure of Central Tendency and Dispersion for awareness of Telkom’s policy

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
Awareness	50	1	1	1.00	.000
Existence of WLB and adherence	50	1	2	1.26	.443
Usage of any family-related benefits	50	1	2	1.20	.404
Policy establishment documentation and communication	50	1	3	1.58	.810
Policy interference	50	1	2	1.28	.454
Valid N (list wise)	50				

A detailed description of the results of the questionnaire’s statistical analysis (Section B), using descriptive statistics, is provided for each of the questions of work-life balance scale.

7.7.1.1. Awareness

On a response scale of YES/NO, respondents were asked if they were aware of any work-life balance benefits through Telkom, to which a mean of (m=1.00) was revealed, indicating that all fifty (50) respondents were aware of work-life balance benefits.

7.7.1.2. Existence of work-life balance and adherence

The mean score (m=1.26) showed that respondents were aware of work-life balance and adherence. The standard deviation (sd=.443) indicated that the responses on work-life balance, and adherence questions leaned more towards ‘*Always*’ on the 5-point Likert scale. The responses revealed that 37 respondents (74.4%) responded ‘*Always*,’ and 13 respondents (26.0%) indicated ‘*Sometimes*’ on the Likert scale, in terms of the existence of work-life balance and adherence.

The next section looks at the measure of central tendency and dispersion for the policy establishment, documentation, and communication.

Figure 7.5 on the next page indicates the frequency of the awareness of the existence of work-life balance and adherence. A 5-point Likert scale was used with (1) Always, and (5) being Never.

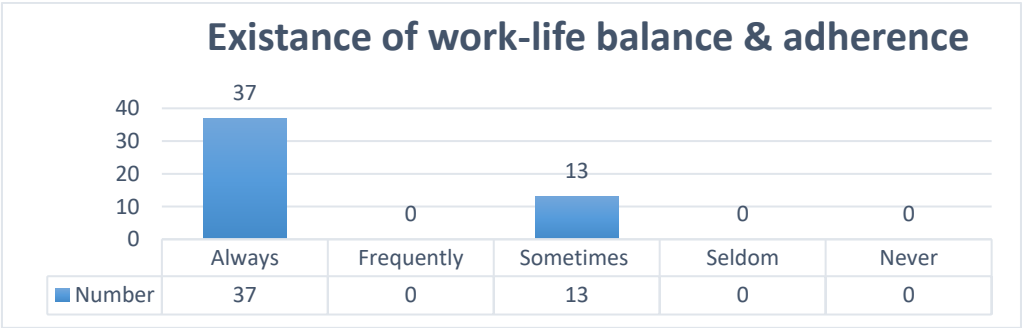


Figure 7. 5: Existence of work-life balance and adherence

7.7.1.2. Usage of available family-related benefits

As seen in Table 7.19, the mean score (m=1.20) showed that respondents were more inclined to use available family-related benefits. The standard deviation (sd, =.404) indicated that the responses on the usage of family-related benefits questions closely leaned more towards ‘*Always*’ on the 5-point Likert scale. The responses revealed that a majority of 27 respondents (54.0%) responded ‘*Always*.’ 20 respondents (40.0%) indicated ‘*Frequently*’ on the Likert scale, in terms of the usage of available family-related benefits. A minority of 3

respondents (6.0%) indicated the mid-point option of ‘*Sometimes*’ on the Likert scale. Figure 7.6 indicates the frequency of the usage of family- related benefits by employees.

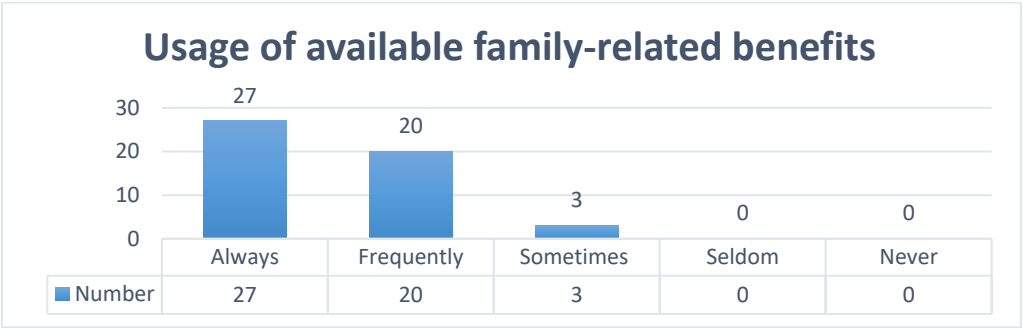


Figure 7. 6: Usage of available family-related benefits by employees

The next section looks at the responses in terms of the policy establishment, documentation and communication.

7.7.1.3. Policy establishment, documentation and communication

As seen in Table 7.19, the mean score ($m=1.58$) showed that respondents were more inclined towards agreeing that the work-life balance policy was well established, documented, and well-communicated. The standard deviation ($sd=.810$) indicated that the responses on the policy establishment, documentation, and communication question leaned more towards ‘*Always*’ on the 5-point Likert scale.

The responses revealed that 31 respondents (62.0%) indicated ‘*Always*’, with 9 respondents (18.0%) indicating ‘*Frequently*’ on the Likert scale. Ten (10) respondents (20.0%) indicated ‘*Sometimes*’ on the Likert scale to the policy establishment, documentation, and communication question. The respondents indicated that having the policies regarding work-life balance communicated to them, enhanced their ability to achieve work-life balance. Figure 7.7 indicates the level of knowledge of work-life policies, and whether these were communicated to the employees before using available family-related benefits by employees.

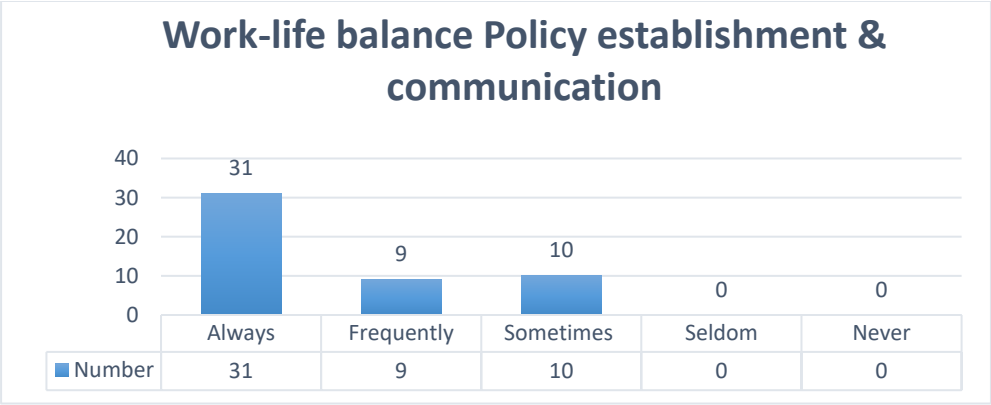


Figure 7. 7: Work-life balance policy establishment and communication

The next section looks at the last component which is the policy interference.

7.7.1.4. Policy interference

Using Figure 7.8, it is determined whether or not employees were made aware of work-life balance policies before they used family-related benefits that are available.

As seen in Table 7.19, the mean scored ($m=1.28$) according to the policy interference question. This indicated that the response rate leaned more towards employees feeling that their work/ career interfered with their responsibilities at work or home. The standard deviation ($sd=.454$) indicated that the responses to policy interference questions leaned closer to ‘*Always*’ on the 5-point Likert scale. The responses revealed that 36 respondents (72.0%) indicated ‘*Always*’, and 13 respondents (26.0%) stated ‘*Frequently*,’ while one respondent indicated ‘*Sometimes*’ on the Likert scale, to the policy interference question.

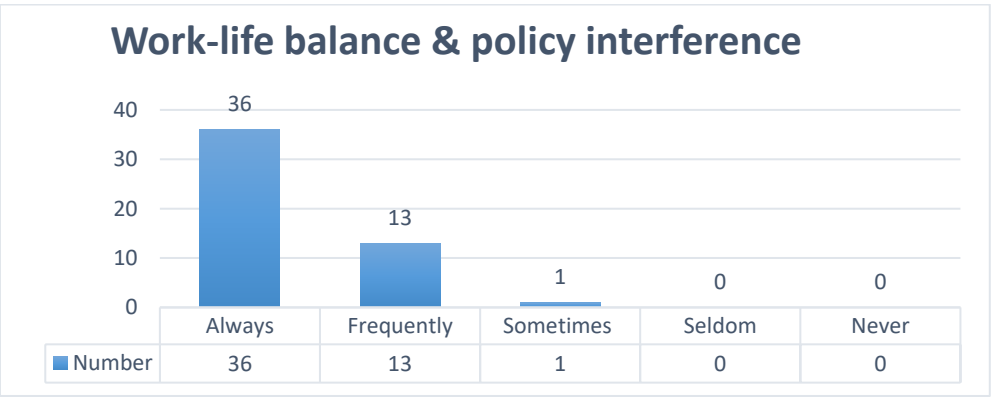


Figure 7. 8: Work-life balance policy and policy interference

The next section looks at the descriptive statistics of objective four, which investigated the organisation's features and personal practice, thus enabled employees to achieve work-life balance at the telecommunications company.

The next section looks at objective 3: To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company.

7.7.2. Objective 3: To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company

The following section presents objective three, which was to assess the challenges female ICT professionals faced in combining work and family life at the telecommunications company. For this objective, the work-life balance scale was used. The scale comprised of:

- Section B (Gender stereotypes and Flexibility); and
- Section C (Dependent adults/children-related tasks, work/home interference, time management, Sense of accomplishment and Skills acquisition) of the work-life balance.

The work-life balance scale asked respondents various questions related to the challenges they faced in combining work and family life. The questions, as indicated in Table 7.20 on the scale, asked the respondents questions 1.5-2.12 on a 5-point Likert scale, that used (1) to indicate 'Always' and (5) to indicate 'Never.' Table 7.20 shows the measure of central tendency and dispersion for challenges female ICT professionals faced.

Table 7.20 shows the work-life balance factors used for challenges female ICT professionals faced and while this is not an exhaustive list, the questions were decided upon linking them to the theoretical frameworks of the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000).

Section B: Work-related scale	
Factors	Items
Gender stereotypes	1.5. Do you feel treated fairly as a female ICT professional in the workplace given you are operating in a male-dominated industry?
	1.6. Do you feel you are given less tasks because you are a female?
Flexibility	1.7. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry?
	1.8. Do you feel flexible work arrangements negatively affect chances for promotion?
Section C: Life-related scale	
Factors	Items
Dependent adults /children-related tasks	2.1. Do you care for dependent adults/children?
	2.2. Do you feel you spend enough time taking care of dependent adults/children?
Work/home interference	2.3. Do you feel that your work/ career interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare?
	2.4. Do you feel that your work/ career keeps you from spending the amount of time that you would like to spend with your family?
	2.5. Do you feel that your work/ career Interferes with your home life?
Time management	2.6. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry?
	2.7. Do you feel you manage your time effectively and efficiently?
	2.8. Do you as a female ICT professional feel you balance your life between work and domestic chores?
Sense of accomplishment	2.9. Do you feel that your work/ career provides you with a sense of accomplishment and this helps me be a better friend or family member?
	2.10. Do you feel that your work/ career does not provide you with a sense of accomplishment and this helps me be a better friend or family member?
	2.11. Do you feel your work/ career helps you acquire skills, and this helps you be a better friend or family member?
	2.12. Do you feel your work/ career does not helps you acquire skills, and this helps you be a better friend or family member?

Table 7.21 shows the Measure of Central Tendency and Dispersion results for challenges female ICT professionals face regarding questions 1.5 to 2.12 of the Work-Life scale.

Table 7. 20: Measure Central Tendency and Dispersion for challenges ICT professionals face

Factors	Questions	N	Minimum	Maximum	Mean	Std. Deviation
Gender stereotypes	Question 1.5	50	1	4	2.10	.974
Gender stereotypes	Question 1.6	50	1	4	2.44	1.110
Flexibility	Question 1.7	50	1	4	2.46	1.147
Flexibility	Question 1.8	50	1	4	2.62	1.086
Dependent adults /children-related tasks	Question 2.1	50	1	4	3.04	1.160
Dependent adults /children-related tasks	Question 2.2	50	1	4	2.94	1.236
Work/home interference	Question 2.3	50	1	4	2.76	1.098
Work/home interference	Question 2.4	50	1	4	2.56	1.163
Work/home interference	Question 2.5)	50	1	4	2.28	1.161
Time management	Question 2.6)	50	1	4	2.58	1.090
Time management	Question 2.7	50	1	4	2.58	1.071
Time management	Question 2.8	50	1	4	2.50	1.182
Sense of accomplishment	Question 2.9	50	1	4	2.34	1.171
Sense of accomplishment	Question 2.10	50	1	4	2.58	1.144
Skills acquisition	Question 2.11	50	1	4	2.58	1.263
Skills acquisition	Question 2.12	50	1	4	2.32	1.151
Valid N (list wise)		50				

A detailed description of the results of the statistical analysis of the questionnaire, on Section B and Section C, using descriptive statistics, is provided for each of the work-life balance scale question.

7.7.2.1. Gender stereotypes

There were two questions on gender stereotypes. The first question was: *Do you feel treated fairly as a female ICT professional in the workplace, given you are operating in a male-dominated industry?*

The statistics revealed a mean ($m=2.10$) and standard deviation ($sd=.974$). The mean and standard deviation indicated an inclination towards ‘*Always*’ instead of ‘*Never*’ on the Likert scale, signifying that females felt they were treated fairly. The statistics showed that 20 respondents (40.0%), which was the highest frequency, felt they were ‘*Frequently*’ treated fairly. The lowest frequencies emerged from 5 respondents (10.0%) felt they were ‘*Sometimes*’ treated fairly, and five respondents (10.0%) indicated ‘*Never*’ respectively.

Figure 7.9 shows the frequency of the first question on challenges related to gender stereotypes. The second question was: *Do you feel you are given less tasks because of being a female?*

The statistics revealed a mean ($m=2.44$) and standard deviation ($sd=1.110$). The mean and standard deviation indicated an inclination towards ‘*Always*’ instead of ‘*Never*’ on the Likert scale, signifying that females were given fewer tasks because they were female. The statistics showed that 14 respondents (28.0%), which was the highest frequency, indicated they ‘*Always*’ felt they were given fewer tasks. Six respondents (12.0%), which was the lowest, indicated ‘*Seldom*.’ Figure 7.9 shows the two questions’ frequency on challenges related to gender stereotypes.

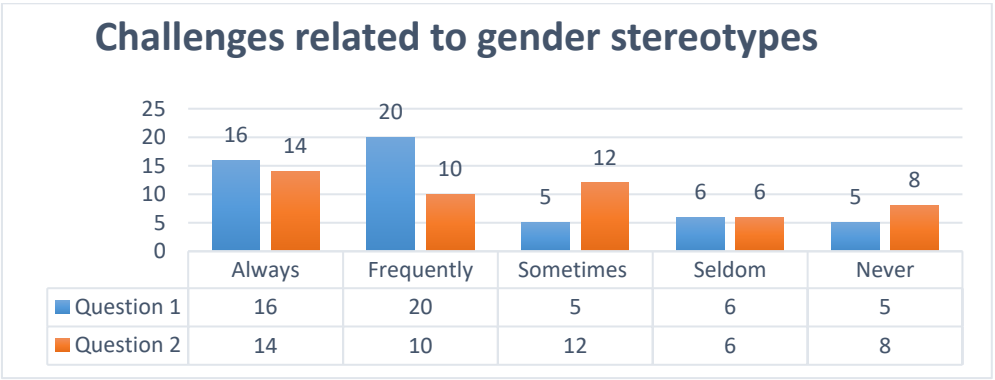


Figure 7. 9: Challenges related to gender stereotypes

On the challenges related to gender stereotypes, question 2 had a higher mean and standard deviation of ($m=2.44$, $sd=1.110$) than question 1 ($m=2.10$, $sd=.974$).

The next section looks at the flexibility aspect.

7.7.2.2. Flexibility

There were two questions on flexibility. The first question was: *Do you feel you are afforded flexibility in the workplace as a female in the ICT industry?*

The statistics revealed a mean (m=2.46) and Standard deviation (sd.=1.147). The mean and standard deviation indicated an inclination towards ‘Always’ instead of ‘Never’ on the Likert scale, signifying that females felt afforded flexibility in the workplace. The statistics showed that 14 respondents (28.0%), which was the highest frequency, felt they were ‘Frequently’ afforded flexibility in the workplace as a female. Six respondents (12.0%), which were the lowest, indicated ‘Seldom.’

The second question was: *Do you feel flexible work arrangements negatively affect chances for promotion?*

The statistics revealed a mean (m=2.62) and standard deviation (sd.=1.086). The mean and standard deviation indicated a wide variation in responses in between ‘Always’ and ‘Never’ on the Likert scale signifying that females felt afforded flexibility in the workplace. The statistics shows that most 12 respondents (24.0%) ‘Frequently’ felt flexible work arrangements negatively affected promotion chances. Three respondents (6.0%), which were the lowest, indicated ‘Seldom.’

Figure 7.10 shows the challenges related to flexibility.

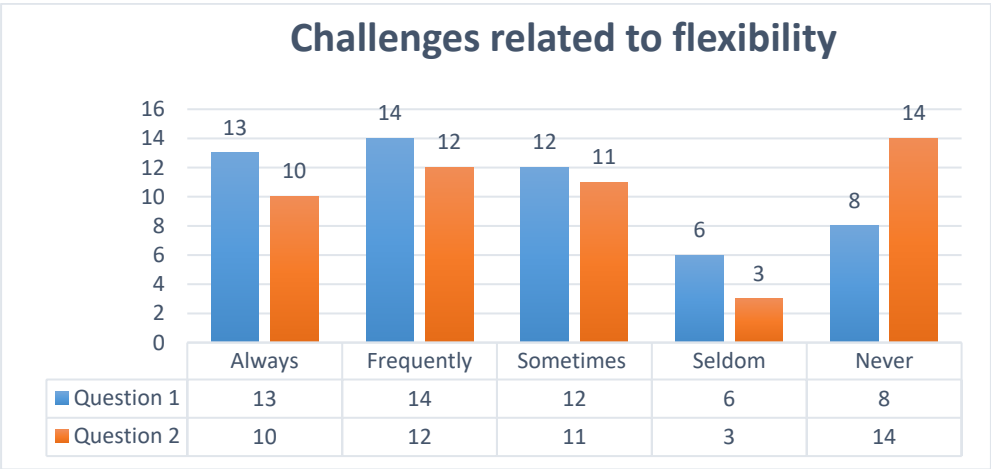


Figure 7. 10: Challenges related to flexibility

On the challenges related to gender flexibility, question 2 had a higher mean and standard deviation of (m=2.62, sd.=1.086) than question 1 (m=2.46, sd.= 1.147).

Although Telkom has a number of flexible working options, the questions on flexibility revealed that it is a factor that could inform women’s decisions to leave ICT jobs. Perhaps this

was derived from their more robust nature of family commitment, or the very fast-paced nature of the Information and Technology Communications industry.

As females get pregnant, or have children to care for at home, many of those women end up having to contend with numerous family-related matters, and as some respondents with spouses indicated, they do not entirely trust their husbands to effectively do the necessary home-related duties. That lack of trust justifies the importance of flexibility, how it is much needed by the female ICT employees. Flexibility also affords the women time to do other things, such as furthering their studies, developing and learning new experiences, which translates into women being able to work extra shifts and overtime if need be.

The next section looks at the dependent adults /children-related tasks aspect.

7.7.2.3. Dependent adults /children-related tasks

There were two questions on the dependent adults /children-related tasks. The first question was: *Do you care for dependent adults/children?*

The statistics revealed a mean ($m=3.04$) and standard deviation ($sd=1.160$). The mean and standard deviation revealed an inclination towards '*Never*' instead of '*Always*' on the Likert scale, signifying that the respondents took care of dependent adults/children. However, the findings revealed that many respondents did take care of dependent adults/children. The statistics showed that a majority of 15 respondents (30.0%), which was the highest, indicated '*Seldom*', and three groups of 8 respondents (16.0%) indicated that they '*Always*', '*Frequently*' and '*Sometimes*' felt they took care of dependent adults/children respectively.

The second question was: *Do you feel you spend enough time taking care of dependent adults/children?*

The statistics revealed a mean ($m=2.94$) and the standard deviation ($sd.=1.236$), a significant variation from the mean. The standard deviation revealed an inclination towards '*Never*' instead of '*Always*' on the Likert scale, signifying that respondents took care of dependent adults/children. The statistics showed that the majority of 15 respondents (30.0%), which was the highest, indicated '*Never*' took care of dependent adults/children. 5 respondents (16.0%) which were the minority '*Sometimes*' took care of dependent adults/children.

The high frequencies on the '*Seldom*' and '*Never*' responses explained why the inclination was more towards '*Never.*' These results showed that respondents bordered on the negative in their

responses to these items. Figure 7.11 shows the frequency of the two questions on challenges related to dependent adults /children-related tasks.

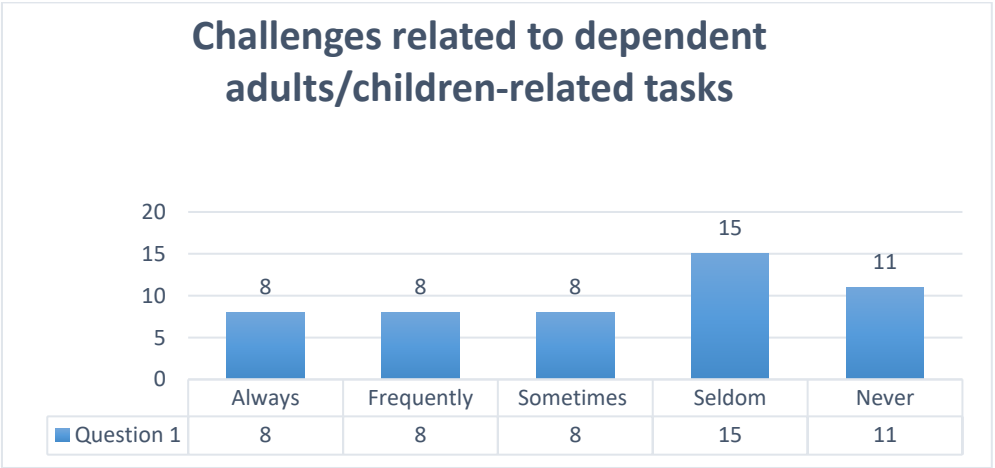


Figure 7. 11: Challenges related to dependent adults/children-related tasks

On the challenges related to dependent adults /children-related tasks, question 1 had a higher mean and standard deviation of (m=3.04, sd.=1.160) than question 2 (m=2.94, sd.= 1.236).

For the dependent adults/children-related question, it should be noted that there were more respondents with no children less than 18 years old, than those with children (see Table 7.16 of this chapter on the distribution of children). There were 24 respondents with children at home than 26 respondents with no children under 18 living at home. The difference was based on the respondents’ maturity and life experience, in terms of their ability to critically evaluate issues from a parental perspective, that is, for those that had children compared to the respondents who did not have children under 18. This could add value to the quality of the data in the study.

The next section looks at the work/home interference aspect.

7.7.2.4. Work/home interference

There were three questions on the work/home interference aspect. The first question was: *Do you feel that your work/ career interferes with your responsibilities at home, such as; yard work, cooking, cleaning, repairs, shopping, paying the bills, childcare?*

The statistics revealed a mean (m=2.76) and standard deviation (sd.=1.098). The mean and standard deviation indicated a central or mid-point response set between ‘*Always*’ and ‘*Never*’ on the Likert scale, signifying that work/ career interfered with

responsibilities at home, such as; yard work, cooking, cleaning, repairs, shopping, paying the bills, childcare. The responses showed that several respondents did feel that work/ career interfered with their responsibilities at home. Fifteen respondents (30.0%), which was the highest, indicated '*Sometimes.*' Three (3) respondents (6.0%), which was the lowest, indicated '*Seldom.*'

The number of hours spent on home-related issues could influence how the females viewed their stay in the ICT environment. This is informed by the fact that the more time females spent on house-related issues, the less time they would have to concentrate on, for example, upgrading their ICT skills, to keep up with the constant changes in ICT. For a female, the added responsibilities of being a caregiver may reduce the number of hours available for work, and hence time becomes an issue.

The second question was: *Do you feel that your work/career keeps you from spending the amount of time that you would like to spend with your family?*

The statistics revealed a mean ($m=2.56$) and standard deviation ($sd.=1.163$). The mean and standard deviation indicated an inclination towards '*Always*' than '*Never*' on the Likert scale, signifying that their work/ career kept them from spending the amount of time that they would have liked to spend with their families. The responses showed that work/ career reduced family time. 13 respondents (26.0%), which was the highest indicated '*Frequently.*' 6 respondents (12.0%) which were the lowest indicated '*Seldom.*'

The third question was: *Do you feel that your work/career interferes with your home life?*

The statistics revealed a mean ($m=2.28$) and standard deviation ($sd.=1.161$). The mean and standard deviation indicated an inclination towards '*Always*' than '*Never*' on the Likert scale, signifying that work/ career interfered with home life. Based on the numbers it was clear that respondents felt work/ career interfered with their home life. The statistics showed that 17 respondents (34.0%), which was the highest, indicated they '*Always*' felt that their work/ career interfered with their home life, and four respondents (8.0%) the lowest indicated '*Seldom.*'

Figure 7.12 shows the frequency of the three questions on challenges related to work/home interference.

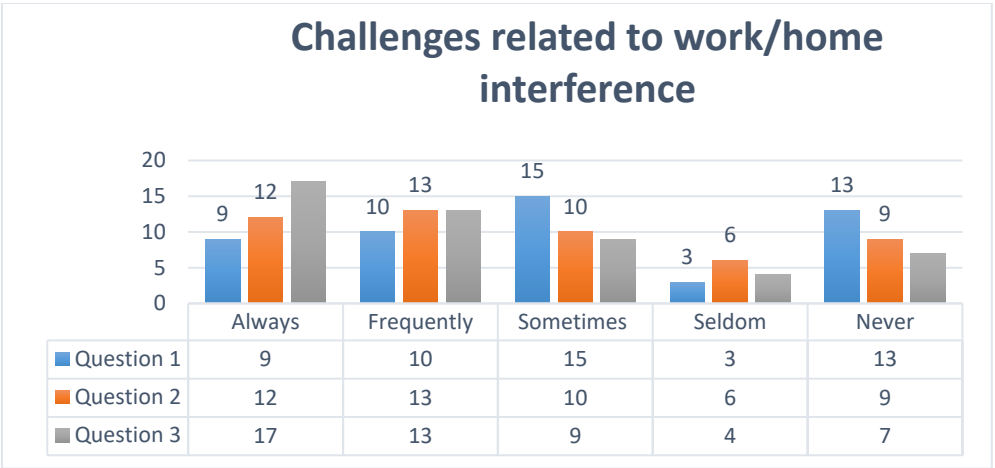


Figure 7. 12: Challenges related to work/home interference

On the challenges related to work/home interference, question 1 had the highest mean and standard deviation of (m=2.75, sd.=1.098) followed by question 2 (m=2.56, sd.= 1.163) and lastly question 3 (m=2.28, sd.=1.161).

Based on the responses to questions 2 and 3, it was evident from the high frequencies of the responses, who would rather leave an ICT job than stay, that work/home interference was an important factor. With the Information and Communications Technology sector being so fast-paced, work/home interference was a negative factor that seriously impacted how females worked, and potentially informed their decisions to stay in the ICT field. Expectations for women in the home and at work are different, hence some women end up overwhelmed and overworked.

The next section looks at the work/home time management aspect.

7.7.2.5. Time management

There were three questions on the time management aspect. The first question was: *Do you as a female in the ICT industry, feel you are afforded flexibility in the workplace?*

The statistics revealed a mean (m=2.58) and standard deviation (sd.=1.090). The mean and standard deviation indicated a central or mid-point response set between ‘*Always*’ and ‘*Never*’ on the Likert scale, signifying that respondents felt that as females in the ICT industry, they were being afforded flexibility in the workplace. The number of respondents affirmed that they were afforded flexibility in the workplace as females in the ICT industry. The statistics showed 19 respondents (38.0%), the highest indicated ‘*Sometimes*’ and four respondents (8.0%), the lowest indicated ‘*Seldom.*’

The second question was: *Do you feel you manage your time effectively and efficiently?*

The statistics revealed a mean ($m=2.58$) and standard deviation ($sd=1.071$). The mean and standard deviation indicated a central or mid-point response set between ‘*Always*’ and ‘*Never*’ on the Likert scale, signifying that respondents felt they managed their time effectively and efficiently. Based on the numbers the respondents felt their work/ career interfered with their home life. The statistics showed that 18 respondents (36.0%), which was the highest, indicated ‘*Sometimes*’ and two respondents (4.0%), which was the lowest, indicated ‘*Seldom*.’

The third question was: *Do you as a female ICT professional feel you balance your life between work and domestic chores?*

The statistics revealed a mean ($m=2.50$) and standard deviation ($sd.=1.182$). The mean and standard deviation indicated an inclination towards ‘*Always*’ than ‘*Never*’ on the Likert scale, signifying that respondents felt that they balanced their life between work and domestic chores. Based on the numbers, the respondents felt they balanced their life between work and domestic chores. The statistics showed that 14 respondents (28.0%), which was the highest, indicated they ‘*Always*’ felt that they balanced their life between work and domestic chores. Five respondents (10.0%), which was the lowest, indicated ‘*Seldom*.’

Figure 7.13 shows the frequency of the three questions on challenges related to time management.

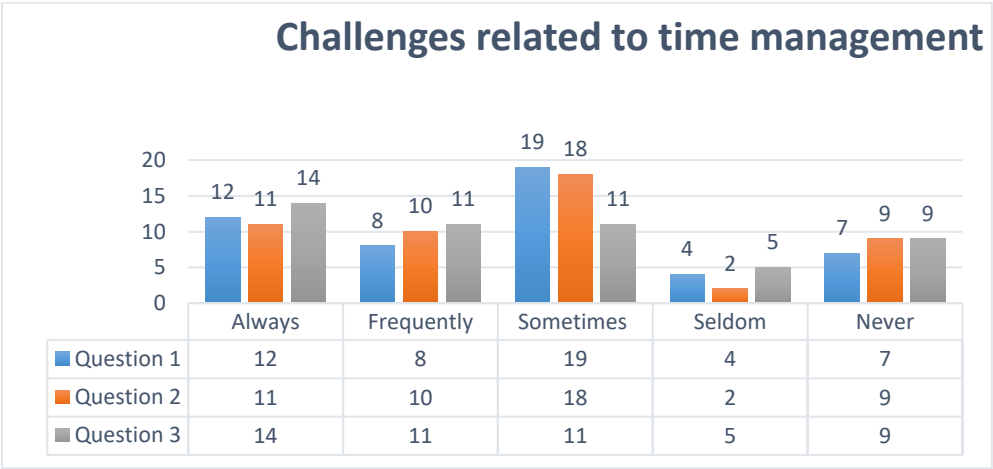


Figure 7. 13: Frequency of the three questions on challenges related to time management

On the challenges related to time management, question 2 had a higher mean and standard deviation of ($m=2.58$, $sd.=1.071$) then followed by question 1 ($m=2.58$, $sd.= 1.090$) and lastly question 3 ($m=2.50$, $sd.=1.182$).

Good time management allows people to accomplish more tasks effectively and efficiently, but for a woman who has multiple roles; the experience is a challenge that could lead them to leave an ICT job.

The next section looks at the sense of accomplishment aspect.

7.7.2.6. Sense of accomplishment

There were two questions on the sense of accomplishment. The first question was: *Do you feel that your work/ career provides you with a sense of accomplishment, and helps you be a better friend or family member?*

The statistics revealed a mean ($m=2.34$) and standard deviation ($sd.=1.171$).

The mean and standard deviation indicated an inclination towards '*Always*' than '*Never*' on the Likert scale, signifying that respondents felt that their work/ career provided them with a sense of accomplishment, which helped them be better friends and family members. From the number of respondents, it appeared their work/ career provided them with a sense of accomplishment, which helped them be better friends and family members. Seventeen respondents (34.0%), which were the highest, indicated they '*Always*' felt that their work/ career provided them with a sense of accomplishment, which helped them be better friends and family members. Five respondents (10.0%), which were the lowest, indicated '*Seldom.*'

The second question was: *Do you feel that your work/ career provides you with no sense of accomplishment, and prevents you be a better friend or family member?*

The statistics revealed a mean ($m=2.58$) and standard deviation ($sd.=1.144$).

The mean and standard deviation indicated an inclination towards '*Always*' than '*Never*' on the Likert scale, signifying that for these respondents their work/ career did not provide them with a sense of accomplishment, which prevented them be better friends or family members. Based on the number's work/ career did not provide the respondents with a sense of accomplishment, which prevents them be a better friend and family member. The statistics showed that 13 respondents (26.0%), which was the highest, indicated '*Sometimes.*' and 5 respondents (10.0%), which were the lowest, indicated '*Never.*'

Figure 7.14 shows the frequency of the two questions on challenges related to sense of accomplishment.

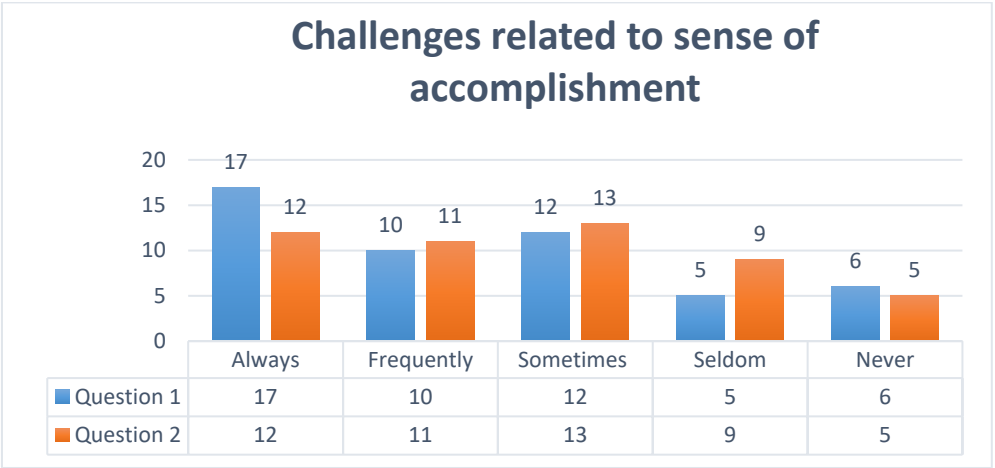


Figure 7. 14: Challenges related to sense of accomplishment

On the challenges related to sense of accomplishment, question 2 had a higher mean and standard deviation of (m=2.68, sd.=1.144) than question 1 (m=2.34, sd.= 1.171). A sense of accomplishment is important for self-worth and when this is missing, chances are an employee will leave their job. The next section looks at the skills acquisition aspect.

7.7.2.7. Skills acquisition

There were two questions on skills acquisition. The first question was: *What makes you feel you can be a better friend and family member through your work/career?* The statistics revealed a mean (m=2.58) and standard deviation (sd.=1.263).

The mean and standard deviation indicated an inclination towards ‘*Always*’ and towards ‘*Never*’ on the Likert scale, showing that there was a small difference in how the respondents felt about their work/ career enhancing acquisition of new skills, something that could help them become a better friend and family member. Based on the findings, the number of respondents felt their work/ career did not feel skills acquisitions helped them acquire skills that helped them be better friends and family members. These findings challenge Rotondi et al. (2017) who indicate that time spent with friends is worthless, in terms of life satisfaction, for individuals who use the technologies like smartphones.

The statistics showed that 15 respondents (30.0%) which was the highest indicated ‘*Frequently*’ and 4 respondents (8.0%) which was the lowest indicated ‘*Seldom*’.

The second question was: *What makes you feel you cannot be a better friend and family member through your work/career?*

The statistics revealed a mean ($m=2.32$) and standard deviation ($sd.=1.151$).

The mean and standard deviation indicated an inclination towards ‘*Always*’ than ‘*Never*’ on the Likert scale, signifying that there was a feeling that respondents’ work/ career did not help them acquire new skills that helped them be better friends and family member. A closer look at the statistics showed that 16 respondents (32.0%), which was the highest, indicated they ‘*always*’ felt that their work/ career did not help them acquire new skills, that helped them be a better friend and family member, and two respondents (16.0%) which were the lowest indicated ‘*Seldom.*’

Figure 7.15 shows the frequency of the two questions on challenges related to Skills acquisition.

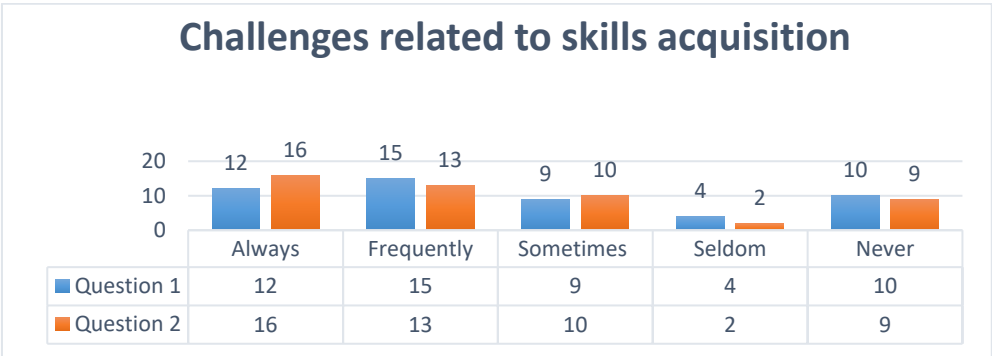


Figure 7. 15: Challenges related to skills acquisition

On the challenges related to skills acquisition, question 1 had a higher mean and standard deviation of ($m=2.58$, $sd.=1.263$) than question 2 ($m=2.32$, $sd.= 1.151$).

This concludes the descriptive statistics. The next section looks at the results of the findings using inferential statistics.

7.8. Results of findings using inferential statistics

Inferential statistics were used to test if demographic factors had differences on the respondents’ replies, on the various components of the self-designed questionnaire “*The Work-Life Balance Study Employee On-Line Survey*”, as well as the features of the organisation, and personal practices that enable employees to achieve work-life balance at the Telkom. This was done to synthesise the aspects of the Life Course (LC) Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) into the current study. The T-test and Analysis of Variance (ANOVA) were used to explore Aim 2, Objectives 2 and 3 of this study:

2. To evaluate the extent to which all employees are aware of policies and programmes that are in place which address work-life balance at the telecommunications company.
3. To assess the challenges female ICT professionals face in combining work and family life at the telecommunications company.

7.8.1. Objective 2: To evaluate the extent to which all employees are aware of policies and programmes that are in place which address work-life balance at the telecommunications company

The results of the statistical analysis using inferential statistics for Objective 2 are now presented.

7.8.1.1. Age and Awareness

Due to the fact that there was only one respondent in the 60+ age group, and two respondents in the age range of 56-60, the two were combined into one scale of above 50, to obtain an effective outcome. This resulted in a scale of 20-25, 26-30, 31-35, 36-40, 41-45, 56-50, and 50 and over.

As shown in Table 7.22, a significant difference was found between the age, and the work-related scale. It was worth noting that those respondents aged below 31 showed a higher ‘awareness’ on the work-related scale (Means of 4.00 for the 26-30 age group and 4.56 for 20-25 age group), than the ones aged from 31-35. In the study, relatively older respondents in the age groups 36 to 40 and above 41-50 (Mean=3.83, 4.13) had a lower score, than younger respondents in other age groups (26-30 and 20-25 age groups). It was noticeable that 36 to 40 had the lowest mean (3.83) among the seven age groups, indicating more awareness on the work-related scale. The 60+ group also had a low mean (3.92).

Table 7. 21: ANOVA: Awareness and categories of Age

ANOVA			
		<i>F</i>	<i>p</i>
(Awareness)			
Existence of WLB and adherence	Between Groups	2.423	.052
Usage of any family-related benefits	Between Groups	2.976	.022
Policy establishment documentation and communication	Between Groups	1.393	.247
Policy interference	Between Groups	.590	.708*
Awareness in age Group (overall)	Between Groups	2.691	.034*

1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never

Regarding awareness in terms of marital status, respondents were categorised as follows: 20-25, 26-30, 31-35, 36-40, 41-50, and 60 +. Table 7.22 shows that there is no significant difference in the Awareness and categories of Age in respect to existence of WLB and adherence ($f=2.423$, $p>0.05$), usage of available family-related benefits ($f=2.976$, $p>0.05$) and policy establishment documentation and communication ($f=1.393$, $p>0.05$). However, there are statistically significant differences in the policy interference ($f=.590$; $p>0.05$) and overall awareness ($f=2.691$; $p>0.05$). The components with significant differences was policy interference.

There was a statistically significant difference in the policy interference ($F=.590$; < 0.05) in the sample, as well as the overall awareness scale ($F=2.691$; $p > 0.05$).

7.8.1.2. Racial grouping and awareness of Telkom work-life balance policies

This section looks at the different racial groupings' awareness of Telkom work-life balance policies. The races that formed part of this study were the Black, White and Mixed races.

Table 7. 22: ANOVA: Awareness and Racial group

ANOVA			
		<i>F</i>	<i>p</i>
(Awareness)			
Existence of WLB and adherence	Between Groups	.554	.775
Usage of any family-related benefits	Between Groups	.802	.555
Policy establishment documentation and communication	Between Groups	.573	.720
Policy interference	Between Groups	.567	.725
Race Group (overall)	Between Groups	.684	0.6

1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never

Regarding the aspect of awareness, employees who were White (Mean = 2.80) and Black (Mean = 2.80) differed significantly from those who were Mixed-race employees (Mean = 1.97). The three-race groups (Mixed-race, White, and Black) were all aware of work-life balance policies. As the findings indicated, the awareness of White respondents and Black respondents, both at a mean (Mean=2.80) was higher and differed from the Mixed-race respondents (Mean=1.97). The Mixed-race respondents, although aware of the Telkom work-life balance policies, their awareness was not at the same level as Whites and Blacks. There were no significant differences in terms of race.

7.8.1.3. Marital status and awareness of Telkom work-life balance policies

Table 7.24 shows the ANOVA results for Work-related scale and categories of marital status.

Table 7. 23: ANOVA: Section B: Work-related scale and categories of marital status

ANOVA			
		<i>F</i>	<i>p</i>
(Awareness)			
Existence of WLB and adherence	Between Groups	.651	.525
Usage of available family-related benefits	Between Groups	.491	.615
Policy establishment documentation and communication	Between Groups	.602	.552
Policy interference	Between Groups	1.500	.003*
Marital status (overall)	Between Groups	1.07	.223

1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never

Regarding the aspect of awareness in terms of marital status, respondents who were categorised as other (the category of not wanting to disclose or part-time co-habiting (Mean = 3.74), followed by singles (Mean = 3.58) were significantly different from those divorced (Mean = 3.35) and married (Mean = 3.17). Hence, others (the category of not wanting to disclose or part-time co-habiting, and single employees), believed more strongly than the latter that they were more aware of all the items under the awareness aspect. The marital status of employees did not affect any of the other dimensions of the work-related scale.

Table 7.24 shows that there is no significant difference in the work-related scale and categories of marital status in respect to the existence of WLB and adherence ($f=.651$, $p>0.05$), usage of available family-related benefits ($f=.491$, $p>0.05$), and policy establishment documentation and communication ($f=.602$, $p>0.05$). The component with significant differences is discussed below. There are statistically significant differences in the policy interference ($f=1.500$; $p>0.05$).

7.8.1.4. Number of children under the age of 18 living at home and awareness of Telkom work-life balance policies

The results of the T-test performed on the items of the awareness of Telkom work-life balance policies of “*The Work-Life Balance Study Employee On-Line Survey*” are described in the following section.

Existence of WLB and adherence ($t=0.38$ $p>0.05$). There was only one difference in the average score for the usage of available family-related benefits, among women with children 4.23, and among women without children 3.77 ($t=-2.55$, $p<0.05$). Women with children considered this very important while women without did not. This showed that women with children under 18 perceived a stronger positive relationship with the usage of any family-related benefits, than women without children under 18. Policy establishment documentation and communication had ($t=0.23$, $p<0.05$) and policy interference ($t=0.23$, $p<0.05$) (see Table 7.25). There was not much difference between females with children under 18 and females without children under 18.

Table 7. 24: Age and number of children under the age of 18 living at home

Factors	Females with children under the age of 18		Females without children under the age of 18			
	Mean	SD	Mean	SD	Df	T
(Awareness)						
Existence of WLB and adherence	4.70	0.46	4.74	0.45	50	0.38
Usage of any family-related benefits	4.23	0.73	3.77	0.35	50	-2.55**
Policy establishment documentation and communication	4.55	0.50	4.58	0.56	50	0.23
Policy interference	4.55	0.65	4.55	0.68	50	0.23
Age and Children (Overall)	2.55	0.11	2.01	0.23	50	04.3

*** $p<0.05$ means significantly different**

1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never

7.8.1.5. Partner/ spouse's employment status, educational level, number of years worked for in the organisation, working hours of Telkom work-life balance policies

For this section, the results of the partner/spouse's employment status, educational level, number of years worked for in the organisation for the Pearson's product moment correlation were looked at.

To determine a relationship between awareness and demographic variables of partner/ spouse's employment status, educational level, the number of years worked for in the organisation, and working hours of Telkom work-life balance policies, Pearson's product-moment correlation coefficients were calculated and tested for significance.

The Work-related Scale Section B: comprised four components, namely; the existence of work-life balance and adherence, usage of available family-related options, policy establishment documentation and communication, and policy interference. The results of the Pearson's product moment's correlation coefficient showed that there were statistically significant relationships between the components of the Work-related Scale Section B: and the demographic variables ($p < .005$), except for the Partner/spouse's employment status and policy interference, which was a moderate negative value, $r = -.368$, $p < .05$. The negative correlation value suggested that partner/spouse's employment status reduced with an increase in policy interference. (For full results of partner/ spouse's employment status, educational level, number of years worked for in the organisation, working hours, and Section B: Work-related refer to Appendix E: Non-significant findings for the results).

The next section looks at the inferential results according to objective 4.

7.8.2. Objective 3: To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company

This section dealt with Section B and C: Work-Life-related scale as it is related to age.

The results for objective 4 for Section B: Work-related scale and Section C of "*The Work-Life Balance Study Employee On-Line Survey*" using inferential statistics are presented Table 7.26.

7.8.2.1. Age and the Work-Life-related scale

Table 7.26 shows the results for ANOVA: Age and the Work-Life-related scale.

Table 7. 25: ANOVA: Age and the Work-life-related scale

ANOVA				
			<i>F</i>	<i>p</i>
Section B: Work-related scale				
Factors	Questions			
Gender stereotypes	Question 1	Between Groups	7.00	0.00*
Gender stereotypes	Question 2	Between Groups	6.32	0.00*
Flexibility	Question 1	Between Groups	6.11	0.00*
Flexibility	Question 2	Between Groups	3.50	.011*
Section C: Life-related scale				
Factors	Questions			
Dependent adults /children-related tasks	Question 1	Between Groups	4.32	0.04*
Dependent adults /children-related tasks	Question 2	Between Groups	2.14	.088
Work/home interference	Question 1	Between Groups	3.96	.006*
Work/home interference	Question 2	Between Groups	4.12	.066*
Work/home interference	Question 3	Between Groups	7.22	0.01*
Time management	Question 1	Between Groups	3.19	0.02*
Time management	Question 2	Between Groups	3.02	0.00*
Time management	Question 3	Between Groups	2.04	0.07
Sense of accomplishment	Question 1	Between Groups	2.78	0.21
Sense of accomplishment	Question 2	Between Groups	4.32	0.00*
Skills acquisition	Question 1	Between Groups	3.11	0.00*
Skills acquisition	Question 2	Between Groups	5.04	0.09*

The correlations are as follows:

- Age and gender stereotypes. The section had two questions pertaining to gender stereotype, Question 1 ($r=7.00$; $p<0.05$); Question 2 ($r=6.32$; $p<0.05$);
- Age and flexibility. The section had two questions pertaining to flexibility, Question 1 ($r=6.11$; $p<0.05$); Question 2 ($r=3.50$; $p<0.05$);
- Age and dependent adults/children-related tasks. The section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=4.32$; $p<0.05$); Question 2 ($r=2.14$; $p<0.05$) (though this one had no significance);
- Age and work/home interference. The section had three questions pertaining to work/home interference, Question 1 ($r=3.96$; $p<0.05$); Question 2 ($r=4.12$; $p<0.05$); Question 3 ($r=7.22$; $p<0.05$);

- Age and time management. The section had three questions pertaining to time management, Question 1 ($r=3.19$; $p<0.05$); Question 2 ($r=3.02$; $p<0.05$); Question 3 ($r=2.04$; $p<0.05$) (though this question had no significance);
- Age and sense of accomplishment. The section had two questions pertaining to sense of accomplishment, Question 1 ($r=2.78$; $p<0.05$) (though this question had no significance); Question 2 ($r=4.32$; $p<0.05$); and
- Age and skills acquisition. The section had two questions pertaining to skills acquisition Question 1 ($r=3.11$; $p<0.05$); Question 2 ($r=5.04$ $p<0.05$).

There were statistically significant differences in the age groups. The ages 21-25 ($m=3.87$) exhibited the highest score for challenges in combining work and family, followed by the ages 26-30 and 31-35 ($m=3.34$). This was perhaps because the women in these age groups had parental responsibilities; many were young parents. This that age did have a bearing on the challenges that respondents faced in combining work and family lives. These results illustrated that the components on the Section B and C: Work-Life-such as gender stereotypes, flexibility, one question of dependent adults/children-related tasks, work/home interference, two questions on time management, one question on the sense of accomplishment, skills acquisition-related scale, were significantly related to the age groups as described above in the sample. Results showed that the respondents’ age had a significant influence over gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition, as seen in the differences across the age groups 21-25, 26-30 and 31-35.

7.8.2.2. Racial grouping and the Work-Life-related scale

Table 7.27 shows the ANOVA results of the racial grouping and the Work-Life-related scale.

Table 7. 26: ANOVA: Racial grouping and the Work-Life-related scale

ANOVA				
			<i>F</i>	<i>p</i>
Section B: Work-related scale				
Factors	Questions			
Gender stereotypes	Question 1	Between Groups	3.56	0.01*
Gender stereotypes	Question 2	Between Groups	4.52	0.02*
Flexibility	Question 1	Between Groups	3.88	0.00*
Flexibility	Question 2	Between Groups	4.79	0.00*
Section C: Life-related scale				
Factors	Questions			
Dependent adults /children-related tasks	Question 1	Between Groups	5.01	0.00*
Dependent adults /children-related tasks	Question 2	Between Groups	4.88	0.00*
Work/home interference	Question 1	Between Groups	5.67	0.00*
Work/home interference	Question 2	Between Groups	6.81	0.00*
Work/home interference	Question 3	Between Groups	6.45	0.00*
Time management	Question 1	Between Groups	6.12	0.00*
Time management	Question 2	Between Groups	5.67	0.01*
Time management	Question 3	Between Groups	6.72	0.00*
Sense of accomplishment	Question 1	Between Groups	4.23	0.00*
Sense of accomplishment	Question 2	Between Groups	3.44	0.00
Skills acquisition	Question 1	Between Groups	3.87	0.00*
Skills acquisition	Question 2	Between Groups	3.01	0.00*

The correlations show positive relationships follows:

- Racial grouping and gender stereotypes. This section had two questions pertaining to gender stereotype, Question 1 ($r=3.56$; $p<0.05$); Question 2 ($r=4.52$; $p<0.05$);
- Racial grouping and flexibility. This section had two questions pertaining to flexibility, Question 1 ($r=3.88$; $p<0.05$); Question 2 ($r=4.79$; $p<0.05$);
- Racial grouping and dependent adults/children-related tasks. This section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=5.01$; $p<0.05$); Question 2 ($r=4.88$ $p<0.05$)
- Racial grouping and work/home interference. This section had three questions pertaining to work/home interference, Question 1 ($r=5.67$; $p<0.05$); Question 2 ($r=6.81$; $p<0.05$); Question 3 ($r=6.45$; $p<0.05$);

- Racial grouping and time management. This section had three questions pertaining to time management, Question 1 ($r=6.12$; $p<0.05$); Question 2 ($r=5.67$; $p<0.05$); Question 3 ($r=6.72$; $p<0.05$);
- Racial grouping and sense of accomplishment. This section had two questions pertaining to sense of accomplishment, Question 1 ($r=4.23$; $p<0.05$) (though this question had no significance); Question 2 ($r=3.44$; $p<0.05$);
- Racial grouping and skills acquisition. This section had two questions pertaining to skills acquisition, Question 1 ($r=3.87$; $p<0.05$); Question 2 ($r=3.01$; $p<0.05$).

There were statistically significant differences in racial groupings. The Black race ($m=4.18$) exhibited the highest score for challenges in combining work and family life, followed by the Mixed-race ($m=3.09$) and, lastly, the White group ($m=2.04$). As with the other findings regarding racial groupings, the Black race was the largest of the three groups.

Results indicated that the respondents' race had a significant influence over gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition, as shown in the differences across the racial groups. The Black race had the highest mean for combining work and family, followed by the Mixed-race and then the White race.

7.8.2.3. Marital status and the Work-Life-related scale

Table 7.28 shows the ANOVA results marital status and the Work-Life-related scale.

Table 7. 27: ANOVA: Marital status and the Work-Life-related scale

ANOVA				
			<i>F</i>	<i>p</i>
Section B: Work-related scale				
Factors	Questions			
Gender stereotypes	Question 1	Between Groups	5.19	0.00*
Gender stereotypes	Question 2	Between Groups	4.09	0.00*
Flexibility	Question 1	Between Groups	3.89	0.01*
Flexibility	Question 2	Between Groups	3.54	0.00*
Section C: Life-related scale				
Factors	Questions			
Dependent adults /children-related tasks	Question 1	Between Groups	4.33	0.00*
Dependent adults /children-related tasks	Question 2	Between Groups	5.78	0.00*
Work/home interference	Question 1	Between Groups	6.70	0.00*
Work/home interference	Question 2	Between Groups	6.18	0.01*
Work/home interference	Question 3	Between Groups	6.03	0.00*
Time management	Question 1	Between Groups	6.12	0.00*
Time management	Question 2	Between Groups	5.89	0.00*
Time management	Question 3	Between Groups	5.16	0.00*
Sense of accomplishment	Question 1	Between Groups	3.56	0.00*
Sense of accomplishment	Question 2	Between Groups	4.44	0.00*
Skills acquisition	Question 1	Between Groups	3.76	0.00*
Skills acquisition	Question 2	Between Groups	3.65	0.00*

The correlations show positive relationships as follows:

- Marital status and gender stereotypes. This section had two questions pertaining to gender stereotypes, Question 1 ($r=5.19$; $p<0.05$); Question 2 ($r=4.09$; $p<0.05$);
- Marital status and flexibility. This section had two questions pertaining to flexibility, Question 1 ($r=3.89$; $p<0.05$); Question 2 ($r=3.54$; $p<0.05$);
- Marital status and dependent adults/children-related tasks. This section had two questions pertaining to adults/children-related tasks, Question 1 ($r=4.33$; $p<0.05$); Question 2 ($r=5.78$ $p<0.05$)
- Marital status and work/home interference. This section had three questions pertaining to work/home interference, Question 1 ($r=6.70$; $p<0.05$); Question 2 ($r=6.18$; $p<0.05$); Question 3 ($r=6.03$; $p<0.05$);
- Marital status and time management. This section had three questions pertaining to time management, Question 1 ($r=6.12$; $p<0.05$); Question 2 ($r=5.89$; $p<0.05$); Question 3 ($r=5.16$; $p<0.05$);

- Marital status and sense of accomplishment. This section had two questions pertaining to sense of accomplishment, Question 1 ($r=3.56$; $p<0.05$); Question 2 ($r=4.44$; $p<0.05$); and;
- Marital status and skills acquisition. This section had two questions pertaining to skills acquisition Question 1 ($r=3.76$; $p<0.05$); Question 2 ($r=3.65$; $p<0.05$).

There were significant statistical differences in marital status. The married group ($m=4.88$) exhibited the highest score for challenges in combining work and family, followed by the co-habiting group ($m=4.02$). The singles ($m=3.64$) and the divorcees had the lowest ($m=2.00$).

Results indicated that the respondents' marital status had a significant influence over gender stereotypes, flexibility, dependent adults /children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition, as seen in the differences across the marital statuses. The married group showed the highest scores for challenges in combining work and family, followed by the co-habiting, singles, and lastly, the divorced group.

7.8.2.4. Number of children under the age of 18 living at home and the Work-Life-related scale

The results of the T-test performed on the items of Section B and C: Work-Life--related scale and the number of children under the age of 18 living at home are shown in Table 7.29.

Table 7. 28: Number of children under the age of 18 living at home and the Work-Life-related scale

Factors	Females with children under the age of 18		Females without children under the age of 18			
	Mean	SD	Mean	SD	df	T
Section B: Work-related scale						
Gender stereotypes (Question 1)	4.40	0.30	3.60	0.40	50	3.02
Gender stereotypes (Question 2)	3.80	0.50	2.78	0.34	50	2.70
Flexibility (Question 1)	4.25	0.40	3.20	0.20	50	2.26
Flexibility (Question 2)	3.09	0.84	2.80	0.58	50	2.40
Section C: Life-related scale						
Dependent adults /children-related tasks (Question 1)	4.20	0.60	3.60	0.82	50	3.43
Dependent adults /children-related tasks (Question 2)	3.90	0.70	2.80	0.50	50	3.30
Work/home interference (Question 1)	3.40	0.82	2.88	0.52	50	3.00
Work/home interference (Question 2)	3.20	0.89	2.80	0.60	50	3.02
Work/home interference (Question 3)	2.82	0.74	2.42	0.82	50	2.40
Time management (Question 1)	4.90	0.33	2.60	0.56	50	3.60
Time management (Question 2)	4.70	0.52	2.60	0.38	50	3.09
Time management (Question 3)	3.12	0.29	2.08	0.78	50	3.89
Sense of accomplishment (Question 1)	4.88	0.58	2.33	0.67	50	3.18
Sense of accomplishment (Question 2)	4.02	0.20	3.29	0.45	50	3.02
Skills acquisition (Question 1)	4.56	0.89	2.87	0.73	50	3.89
Skills acquisition (Question 2)	3.62	0.78	3.12	0.88	50	3.00

The T-test results revealed the following:

Gender stereotypes had two questions. Question 1; for females with children under the age of 18 (m=4.40) and for females without children under the age of 18 (m=3.60); (t=3.02< 0.05). Question 2; for females with children under the age of 18 (m=3.09) and for females without children under the age of 18 (m=2.80); (t=2.40< 0.05).

Flexibility had two questions. Question 1; for females with children under the age of 18 (m=4.25) and for females without children under the age of 18 (m=3.20); (t=2.26< 0.05). Question 2; for females with children under the age of 18 (m=3.09) and for females without children under the age of 18 (m=2.80); (t=2.40< 0.05).

Dependent adults /children-related tasks had two questions. Question 1 for females with children under the age of 18 (m=4.20) and for females without children under the age of 18

($m=3.60$); ($t=3.43 < 0.05$). Question 2 for females with children under the age of 18 ($m=3.90$) and for females without children under the age of 18 ($m=2.80$); ($t=3.30 < 0.05$).

Work/home interference had three questions. Question 1 for females with children under the age of 18 ($m=3.40$) and for females without children under the age of 18 ($m=2.88$); ($t=3.00 < 0.05$). Question 2 for females with children under the age of 18 ($m=3.20$) and for females without children under the age of 18 ($m=2.80$); ($t=3.02 < 0.05$). Question 3 for females with children under the age of 18 ($m=2.82$) and for females without children under the age of 18 ($m=2.42$); ($t=2.40 < 0.05$).

Time management had three questions. Question 1 for females with children under the age of 18 ($m=4.90$) and for females without children under the age of 18 ($m=2.60$); ($t=3.60 < 0.05$). Question 2 for females with children under the age of 18 ($m=4.70$) and for females without children under the age of 18 ($m=2.60$); ($t=3.09 < 0.05$). Question 3 for females with children under the age of 18 ($m=3.12$) and for females without children under the age of 18 ($m=2.08$); ($t=3.89 < 0.05$).

A sense of accomplishment had two questions. Question 1 for females with children under the age of 18 ($m=4.88$) and for females without children under the age of 18 ($m=2.33$); ($t=3.18 < 0.05$). Question 2 for females with children under the age of 18 ($m=4.02$) and for females without children under the age of 18 ($m=3.29$); ($t=3.02 < 0.05$).

Skills acquisition had two questions. Question 1 for females with children under the age of 18 ($m=4.56$) and for females without children under the age of 18 ($m=2.87$); ($t=3.89 < 0.05$). Question 2 for females with children under the age of 18 ($m=3.62$) and for females without children under the age of 18 ($m=3.12$); ($t=3.00 < 0.05$).

For all the items, the results indicated that the number of children under the age of 18 had a significant influence over gender stereotypes, flexibility, dependent adults /children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition as seen in the differences between females with children under the age of 18 and females without children under the age of 18. Females with children under the age of 18 had higher means than females without children under 18, indicating that they faced challenges in combining work and family lives.

7.8.2.5 Partner/ spouse's employment status and the Work-Life-related scale

Table 7.30 depicts the Pearson's product moment correlations of Section B and C: Work-Life-related scale and partner/ spouse's employment status.

Table 7. 29: Correlations of the Work-Life-related scale and partner/spouse's employment

			Pearson Correlation	<i>p</i>	<i>N</i>
Partner/spouse's employment status	Section B: Work-related scale				
	Gender stereotypes	Question 1	.676	.001	50
	Gender stereotypes	Question 2	.600	.008	50
	Flexibility	Question 1	.734	.000	50
	Flexibility	Question 2	.701	.000	50
Partner/spouse's employment status	Section C: Life-related scale				
	Dependent adults /children-related tasks	Question 1	.611	.000	50
	Dependent adults /children-related tasks	Question 2	.516	.000	50
	Work/home interference	Question 1	.712	.000	50
	Work/home interference	Question 2	.603	.008	50
	Work/home interference	Question 3	.735	.000	50
	Time management	Question 1	.670	.000	50
	Time management	Question 2	.613	.000	50
	Time management	Question 3	.602	.000	50
	Sense of accomplishment	Question 1	.510	.000	50
	Sense of accomplishment	Question 2	.619	.000	50
	Skills acquisition	Question 1	.600	.000	50
	Skills acquisition	Question 2	.541	.000	50

There were strong, positive correlations for all the items.

- Partner/ spouse's employment status and gender stereotypes. The section had two questions pertaining to gender stereotype, Question 1 ($r=.676$; $p<0.05$); Question 2 ($r=.600$; $p<0.05$);
- Partner/ spouse's employment status and flexibility. The section had two questions pertaining to flexibility, Question 1 ($r=.734$; $p<0.05$); Question 2 ($r=.701$; $p<0.05$);
- Partner/ spouse's employment status and dependent adults/children-related tasks. The section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=.611$; $p<0.05$); Question 2 ($r=.516$; $p<0.05$);

- Partner/ spouse’s employment status and work/home interference. The section had three questions pertaining to work/home interference, Question 1 ($r=.712$; $p<0.05$); Question 2 ($r=.603$; $p<0.05$); Question 3 ($r=.735$; $p<0.05$);
- Partner/ spouse’s employment status and time management. The section had three questions pertaining to time management, Question 1 ($r=.670$; $p<0.05$); Question 2 ($r=.613$; $p<0.05$); Question 3 ($r=.602$; $p<0.05$);
- Partner/ spouse’s employment status and sense of accomplishment. The section had two questions pertaining to sense of accomplishment, Question 1 ($r=.510$; $p<0.05$); Question 2 ($r=.619$; $p<0.05$); and
- Partner/ spouse’s employment status and skills acquisition. The section had two questions pertaining to skills acquisition Question 1 ($r=.600$; $p<0.05$); Question 2 ($r=.541$ $p<0.05$).

The high correlations indicated that the partner/ spouse’s employment status influences items on Section B and C: Work-Life-related scale. The highest mean ($m=3.69$) was from those with partners/spouses working full-time, then those with partners/spouses working part-time ($m=2.89$). The group with partners/spouses who did not work ($m=2.34$). The category with partner/spouses who did not disclose ($m=2.01$). This pointed to the issue that the group with partners/spouses who were employed full-time, were more likely to face challenges directly related to the items identified in Section B and C of the Work-Life-related scale, than those with partners/spouses who did not disclose their employment status.

Results indicated that the partners/spouse’s employment status significantly influenced gender stereotypes, flexibility, dependent adults /children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition. This was revealed in the differences across partners/spouses’ employment statuses, with those having partners/spouses working full-time, showing the highest correlation for those with challenges in combining work and family. This was followed by those with partners/spouses working part-time, then those with partner/spouses who did not work group, and then with partner/spouses who did not disclose their employment statuses.

7.8.2.6. Educational level and the Work-Life-related scale

Table 7.31 depicts the Pearson’s product moment correlations of the Work-Life-related scale and educational level.

Table 7. 30: Correlations of the Work-Life-related scale and Educational level

			Pearson Correlation	<i>p</i>	<i>N</i>
Educational level	Section B: Work-related scale				
	Gender stereotypes	Question 1	.722	.000	50
	Gender stereotypes	Question 2	.670	.000	50
	Flexibility	Question 1	.540	.001	50
	Flexibility	Question 2	.600	.000	50
Educational level	Section C: Life-related scale				
	Dependent adults /children-related tasks	Question 1	.632	.000	50
	Dependent adults /children-related tasks	Question 2	.501	.000	50
	Work/home interference	Question 1	.810	.000	50
	Work/home interference	Question 2	.711	.000	50
	Work/home interference	Question 3	.623	.000	50
	Time management	Question 1	.702	.000	50
	Time management	Question 2	.560	.000	50
	Time management	Question 3	.630	.000	50
	Sense of accomplishment	Question 1	.709	.000	50
	Sense of accomplishment	Question 2	.450	.001	50
	Skills acquisition	Question 1	.502	.000	50
	Skills acquisition	Question 2	.500	.000	50

For the Work-Life-related scale and educational level, there were strong correlations between all the items.

- Educational level and gender stereotypes. The section had two questions pertaining to gender stereotype, Question 1 ($r=.722$; $p<0.05$); Question 2 ($r=.670$; $p<0.05$);
- Educational level and flexibility. The section had two questions pertaining to flexibility, Question 1 ($r=.540$; $p<0.05$); Question 2 ($r=.600$; $p<0.05$);
- Educational level and dependent adults/children-related tasks. The section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=.632$; $p<0.05$); Question 2 ($r=.501$; $p<0.05$);
- Educational level and work/home interference. The section had three questions pertaining to work/home interference, Question 1 ($r=.810$; $p<0.05$); Question 2 ($r=.711$; $p<0.05$); Question 3 ($r=.623$; $p<0.05$);

- Educational level and time management. The section had three questions pertaining to time management, Question 1 ($r=.702$; $p<0.05$); Question 2 ($r=.560$; $p<0.05$); Question 3 ($r=.630$; $p<0.05$);
- Educational level and sense of accomplishment. The section had two questions pertaining to sense of accomplishment, Question 1 ($r=.709$; $p<0.05$); Question 2 ($r=.450$; $p<0.05$); and
- Educational level status and skills acquisition. The section had two questions pertaining to status and skills acquisition Question 1 ($r= .502$; $p<0.05$); Question 2 ($r=.500$; $p<0.05$).

The high correlations indicated that educational level affected items on Section B and C: Work-Life-related scale. The highest mean ($m=4.02$) was for diploma qualifications, for degrees ($m=3.19$). The postgraduate degrees ‘category showed a low mean ($m=2.31$). This revealed that the lower education the employee attained, the more likely they faced challenges in combining work and family life, in direct relation to the items identified in Section B and C of the Work-Life-related scale.

Results indicated that the respondents’ educational level significantly affected gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition, as revealed in the differences in educational levels. Those with diploma qualifications showed the highest correlation for challenges in combining work and family, followed by those with degree qualifications, and then those with postgraduate degrees.

7.8.2.7. Number of years worked in the organisation and the Work-Life-related scale

Table 7.32 depicts the Pearson’s product moment correlations of the Work-Life-related scale and the number of years worked in the organisation.

Table 7. 31: Correlations of the Work-Life-related scale and the number of years worked in an organisation

			Pearson Correlation	<i>p</i>	<i>N</i>
Number of years worked for in the organisation	Section B: Work-related scale				
	Gender stereotypes	Question 1	.801	.000	50
	Gender stereotypes	Question 2	.608	.001	50
	Flexibility	Question 1	.511	.000	50
	Flexibility	Question 2	.618	.000	50
Number of years worked for in the organisation	Section C: Life-related scale				
	Dependent adults /children-related tasks	Question 1	.567	.000	50
	Dependent adults /children-related tasks	Question 2	.623	.000	50
	Work/home interference	Question 1	.812	.002	50
	Work/home interference	Question 2	.823	.000	50
	Work/home interference	Question 3	.702	.000	50
	Time management	Question 1	.611	.000	50
	Time management	Question 2	.674	.000	50
	Time management	Question 3	.688	.000	50
	Sense of accomplishment	Question 1	.567	.001	50
	Sense of accomplishment	Question 2	.612	.000	50
	Skills acquisition	Question 1	.509	.000	50
	Skills acquisition	Question 2	.598	.000	50

For the Work-Life-related scale and educational level, there were strong correlations between all the items.

- Number of years worked in the organisation and gender stereotypes. The section had two questions pertaining to gender stereotypes, Question 1 ($r=.801$; $p<0.05$); Question 2 ($r=.608$; $p<0.05$);
- Number of years worked in the organisation and flexibility. The section had two questions pertaining to flexibility, Question 1 ($r=.511$; $p<0.05$); Question 2 ($r=.618$; $p<0.05$);
- Number of years worked in the organisation and dependent adults/children-related tasks. The section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=.567$; $p<0.05$); Question 2 ($r=.623$; $p<0.05$);

- Number of years worked in the organisation and work/home interference. The section had three questions pertaining to work/home interference Question 1 ($r=.812$; $p<0.05$); Question 2 ($r=.823$; $p<0.05$); Question 3 ($r=.702$; $p<0.05$);
- Number of years worked in the organisation and time management. The section had three questions pertaining to time management, Question 1 ($r=.611$; $p<0.05$); Question 2 ($r=.674$; $p<0.05$); Question 3 ($r=.688$; $p<0.05$);
- Number of years worked in the organisation and sense of accomplishment. The section had two questions pertaining to sense of accomplishment, Question 1 ($r=.567$; $p<0.05$); Question 2 ($r=.612$; $p<0.05$); and
- Number of years worked for in the organisation and skills acquisition. The section had two questions pertaining to skills acquisition, Question 1 ($r=.509$; $p<0.05$); Question 2 ($r=.598$; $p<0.05$).

The high correlations indicated that number of years worked in the organisation affected items on Section B and C: Work-Life-related scale. The highest mean ($m=3.19$) was by those with six months to 1 year, then those with less than six months ($m=2.05$). The 2 to 5-year category showed a low mean ($m=1.81$). The 6-10 years and 11- 20 years with the organisation showed a mean ($m=1.02$). This revealed that the lower the number of years an employee worked for the organisation, the more likely they faced challenges directly related to the items identified in Section B and C of the Work-Life-related scale.

Results showed that the number of years’ respondents worked in the organisation significantly affected gender stereotypes, flexibility, dependent adults /children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition as revealed by the differences in the number of years worked in the organisation. Those who worked six months to 1 year showed the highest correlation related to challenges in combining work and family, followed by those with less than six months, then 2 to 5-year group, and lastly, those with 6-10 years and 11- 20 years with the organisation.

7.8.2.8. Working hours and the Work-Life-related scale

Table 7.33 depicts the Pearson’s product moment correlations of the Work-Life-related scale and Working hours.

Table 7. 32: Correlations of the Work-Life-related scale and Working hours

			Pearson Correlation	<i>p</i>	<i>N</i>
Working hours	Section B: Work-related scale				
	Gender stereotypes	Question 1	.310	.001	50
	Gender stereotypes	Question 2	.250	.008	50
	Flexibility	Question 1	.464	.000	50
	Flexibility	Question 2	.384	.000	50
Working hours	Section C: Life-related scale				
	Dependent adults /children-related tasks	Question 1	.509	.000	50
	Dependent adults /children-related tasks	Question 2	.644	.000	50
	Work/home interference	Question 1	.731	.000	50
	Work/home interference	Question 2	.250	.008	50
	Work/home interference	Question 3	.464	.000	50
	Time management	Question 1	.644	.000	50
	Time management	Question 2	.640	.000	50
	Time management	Question 3	.796	.000	50
	Sense of accomplishment	Question 1	.731	.000	50
	Sense of accomplishment	Question 2	.538	.000	50
	Skills acquisition	Question 1	.727	.000	50
	Skills acquisition	Question 2	.796	.000	50

There were strong, positive correlations between the following:

- Working hours and gender stereotypes. This section had two questions pertaining to gender stereotypes, Question 1 ($r=.310$; $p<0.05$); Question 2 ($r=.250$; $p<0.05$);
- Working hours and flexibility. The section had two questions pertaining to flexibility, Question 1 ($r=.464$; $p<0.05$); Question 2 ($r=.384$; $p<0.05$);
- Working hours and dependent adults/children-related tasks. This section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=.509$; $p<0.05$); Question 2 ($r=.644$; $p<0.05$);
- Working hours and work/home interference. This section had three questions pertaining to work/home interference, Question 1 ($r=.731$; $p<0.05$); Question 2 ($r=.250$; $p<0.05$); Question 3 ($r=.464$; $p<0.05$);

- Working hours and time management. This section had three questions pertaining to time management, Question 1 ($r=.644$; $p<0.05$); Question 2 ($r=.640$; $p<0.05$); Question 3 ($r=.796$; $p<0.05$);
- Working hours and sense of accomplishment. This section had two questions pertaining to sense of accomplishment, Question 1 ($r=.731$; $p<0.05$); Question 2 ($r=.538$; $p<0.05$); and
- Working hours and skills acquisition. This section had two questions pertaining to skills acquisition Question 1 ($r=.727$; $p<0.05$); Question 2 ($r=.796$; $p<0.05$).

The results indicated significant differences between working hours; and gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, skills acquisition. Those with the highest mean score (mean=4.15) had working hours of 41-50 hours, followed by a mean score (m=3.12) for those with 40 hours. The group with 51-60, 61-70, and 70+ hours had the lowest mean score (m=2.10), due to the limited number of employees who clocked such high hours. The results indicated that working hours had a significant bearing on gender stereotypes and flexibility. This was because women still carried the burden of doing most domestic chores, and caring for adults, which impacted their lives, thus affected dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition.

Results indicated that the working hours of the respondents had a significant effect over gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition as revealed by the differences in working hours; those with 41-50 hours showing the highest influence from challenges in combining work and family followed by those with 40 hours, and lastly those with 51-60, 61-70 and 70+ hours.

7.8.2.9. Work departments and the Work-Life-related scale

Table 7.34 depicts the Pearson’s product moment correlations of the Work-Life-related scale and Work departments.

Table 7. 33: Correlations of the Work-Life-related scale and Work departments

			Pearson Correlation	<i>p</i>	<i>N</i>
Work departments	Section B: Work-related scale				
	Gender stereotypes	Question 1	.344	.000	50
	Gender stereotypes	Question 2	.456	.000	50
	Flexibility	Question 1	.532	.000	50
	Flexibility	Question 2	.418	.000	50
Work departments	Section C: Life-related scale				
	Dependent adults /children-related tasks	Question 1	.402	.000	50
	Dependent adults /children-related tasks	Question 2	.309	.000	50
	Work/home interference	Question 1	.512	.000	50
	Work/home interference	Question 2	.509	.000	50
	Work/home interference	Question 3	.532	.000	50
	Time management	Question 1	.616	.000	50
	Time management	Question 2	.632	.000	50
	Time management	Question 3	.656	.000	50
	Sense of accomplishment	Question 1	.343	.000	50
	Sense of accomplishment	Question 2	.332	.000	50
	Skills acquisition	Question 1	.309	.000	50
	Skills acquisition	Question 2	.311	.000	50

There were positive correlations between the following:

- Work departments and gender stereotypes. This section had two questions pertaining to gender stereotypes, Question 1 ($r=.344$; $p<0.05$); Question 2 ($r=.456$; $p<0.05$);
- Work departments and flexibility. This section had two questions pertaining to flexibility, Question 1 ($r=.532$; $p<0.05$); Question 2 ($r=.418$; $p<0.05$);
- Work departments and dependent adults/children-related tasks. This section had two questions pertaining to dependent adults/children-related tasks, Question 1 ($r=.402$; $p<0.05$); Question 2 ($r=.309$; $p<0.05$);
- Work departments and work/home interference. This section had three questions pertaining to work/home interference, Question 1 ($r=.512$; $p<0.05$); Question 2 ($r=.509$; $p<0.05$); Question 3 ($r=.532$; $p<0.05$);
- Work departments and time management. This section had three questions pertaining to time management, Question 1 ($r=.616$; $p<0.05$); Question 2 ($r=.632$; $p<0.05$); Question 3 ($r=.656$; $p<0.05$);

- Work departments and sense of accomplishment. This section had two questions pertaining to sense of accomplishment, Question 1 ($r=.343$; $p<0.05$); Question 2 ($r=.332$; $p<0.05$); and
- Work departments and skills acquisition. This section had two questions pertaining to skills acquisition, Question 1 ($r=.309$; $p<0.05$); Question 2 ($r=.311$; $p<0.05$).

The results indicated that the differences in the work departments significantly differed between categories. The results of the means were as follows: Information and Communications Technology ($m= 3.19$), Information Technology ($m=2.89$), and Auxiliary services (3.67), which had the highest differences revealed high usage of the **Telkom Touch** programme. As in previous cases with the same results the explanation could be that a clear majority of the employees worked under the auxiliary services department, compared to 20 employees, the Information and Communications Technology, and 15 employees in Information Technology Departments.

Results indicated that the respondents' work departments significantly affected gender stereotypes, flexibility, dependent adults/children-related tasks, work/home interference, time management, sense of accomplishment, and skills acquisition, as seen in the differences in the work departments. Those respondents in the Auxiliary services showed the highest challenges in combining work and family, followed by those with Information and Communications Technology, and lastly, those with the Information Technology department.

7.9. Conclusion

The online survey instrument development, "*The Work-Life Balance Study Employee Online Survey*," and the steps undertaken in this evolutionary process were discussed in this chapter. This chapter presented the findings of Stage 2 of this study: the online survey results using the instrument, "*The Work-Life Balance Study Employee Online Survey*." In the next chapter (Chapter 8), the results of Stage 3 of the study, the qualitative phase where interviews were conducted with the female ICT professionals, are presented.

Chapter 8

Presentation of Results: Qualitative Stage

8.1. Introduction

This chapter presents the findings of Stage 3: The qualitative phase of the study. The chapter covers several themes which pertain to key areas and questions of the research. The findings are presented following Aim 3, research objective 4 of the study. The chapter is divided into three sections; firstly, the chapter deals with female occupational interpretations of work. These occupational interpretations were sub-divided into career women's views of work life, career women's views of career retention in the ICT field and career women's perceptions workplace conduct.

Secondly, the chapter deals with female domestic interpretations of home. These domestic interpretations were sub-divided into how career women viewed home life, how they interpreted domestic activities, time allocations to domestic work, different home roles and time management, and their lives regarding the use of ICT and the Internet.

Thirdly, the chapter deals with female interpretations of work-life synergy. These interpretations of work-life synergy were sub-divided into how career women perceived work-life balance at Telkom and work-life balance on the management of career with personal life. The perception of career women of ideal balance in terms of work-life synergy and work-life integration at Telkom was also considered. The career females' work-life integration and outlook on work-life and the management of flexible labor time arrangements at Telkom are also looked at in this chapter.

8.2. Research objectives of the study

This chapter will address the research aim 3 and objective 4. The aim and objective are stated as follows:

- Aim 3:

To explore the experiences of female ICT professionals which inform their decision to leave or stay with the telecommunications organisation.

- Objective 4:

To determine the experiences and challenges female ICT professionals encounter in their personal and work lives, which influence their decision to stay or leave an ICT job at the telecommunications company.

8.3. Response rate leading to the interview schedule

The previous chapter presented Stage 2 of the research, which indicated a number of 50 participants. At the end of the online survey, a request was made to participants to express their interest in participating in an individual interview for the qualitative stage. Participants were asked to indicate their willingness to participate in the interview stage of the study, 25 participants initially agreed that they would participate, but in the end, only 16 participants took part in the final interview, and these were the ones who actually availed themselves for the interviews, as others were not able to do so due to time constraints. A detailed description of the female ICT professionals who participated in the interview stage of this study can be found in Table 8.1.

Table 8. 1: Participants in the in-depth semi-structured interviews

JOB PROFILES	PARTICIPANTS IN THE INTERVIEW
Operations specialists	3
Senior data management managers	2
Junior ICT Technicians	2
Systems Technicians	3
ICT Technicians	3
Data base network administrators	3
Total	16

The next section outlines the themes and sub-themes in accordance with Aim 3 and Objective 5.

8.4. Stage 3: Qualitative study

To fully address Aim 3 and Objective 4 this section was divided into three themes. Under the qualitative study, themes and sub-themes are clusters based on sections with related questions of the interview schedule. The themes and their respective sub-themes are depicted in Table 8.2.

Table 8. 2: Main themes and sub-themes according the qualitative study

Theme 1: Occupational interpretations of work	Based on question (s) on the interview schedule
Sub theme 1: Career females’ views of work life	1,2,3,4,5 & 6
Sub theme 2: Career females’ views of career retention in the ICT field	7
Sub theme 3: Career females’ perceptions workplace conduct	8
Theme 2: Domestic interpretations of home	
Sub theme 1: Career females’ views of home life	1,2,3,4,5 & 6
Sub theme 2: Career females’ domestic activities	7, 8 & 9
Sub theme 3: Career females’ time allocations to domestic work	8 & 9
Sub theme 4: Career females’ different home roles and time management	10
Sub theme 5: Career females’ lives regarding the use of ICT and Internet	10
Theme 3: Interpretations of work-life synergy	
Sub theme 1: Career females’ perceptions of work-life balance at Telkom	1
Sub theme 2: Career females’ perceptions of work-life balance on management of career with personal life	2
Sub theme 3: Career females’ perceptions of ideal balance in terms of work-life synergy at Telkom	3
Sub theme 4: Career females’ work-life integration at Telkom	4
Sub-theme 5: Career females’ experiences of work-life integration at Telkom	5
Sub theme 6: Career females’ outlook on work-life and management of flexible labor time arrangements at Telkom	7

The next section discusses the results of the main themes and their respective sub-themes.

8.5. Theme 1: Occupational interpretations of work

This main theme revolves around the occupational interpretations of work by the female ICT professionals. The way people perceive their workplaces differs from person to person, based on individual preferences. Table 8.3. Presents the frequency table of career females’ view of work life.

Table 8. 3: Career females’ views of work-life

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Occupational interpretations of work	(Sub-theme 1: Career females’ views of work life)		
	Definitions of work & work representations	5	31.25
	Boundaries of work & limitations	5	31.25
	Job changes over-time	6	37.5
Total		16	100

8.5.1. Sub-theme 1: Career females’ views of work life

In this sub-theme, participants provided interpretations of their definitions of work and work representations. This involved how different female ICT professionals viewed their work, what work meant to them, meaning the tasks done by the female ICT professionals for which they got paid remuneration in monetary incentive. Work representations explained how female ICT professionals understood and interpreted the nexus of work, and its meaning as experienced by female ICT professionals. Interpretations of boundaries of work, and limitations were also sought. This meant finding the definition from what the female ICT participants gave in terms of their perceptions of labour, their careers, the awareness and guidance of their relationships with superiors, colleagues, and clients.

Participant 2 explained, *“My work represents a form of achievement. I spent so many years at varsity and so it is an achievement to be working and be able to have relationships with other people.”*

In the ICT world and their personal lives, female professionals navigated their professional and personal lives together. This led to limitations in work in the form of time constraints and the inability to balance work and life. Participants viewed work as something that one went to for employment purposes and as a means of forming relationships with co-workers, clients, and superiors.

Participant 16 mentioned, *“I got a promotion and my tasks increased and I was charged with more responsibilities.”*

Under this theme, interpretations of job changes were also examined over time. Those in the world of information and communication technology noted that it is a fast-paced industry. As a result, these female ICT professionals experienced job changes because they had to stay home

to take care of their families and develop specialised skills, or they did not improve their skill sets due to staying away from the workplace.

Participant 3 explained that, *“Oh yeah, my job has changed because I am now given a lot of responsibilities and this has affected my time in terms of what I do career wise and personally.”*

Participant 16 stated that, *“I recently graduated in my Masters’ and I see that now I have more added responsibilities.”*

Participant 12 concurred with Participant 16 by stating that, *“I recently got more training on Informatics and Interaction Development, now I have time issues as I have more work, and this has affected my time in terms of family as I cannot spend a lot of time with them.”*

The participants all shared the same notion that earning a living and being productive, gave them a higher status in society, and this was supported by their various views on when their work starts, when they assume the role of an ICT professional. It was evident from the participants’ work where their limitations were explained in the ICT workplace. Even though they increased their skills through continuing their studies, they continued to be impacted by other changes in the work environment. For instance, females are not allowed to carry heavy equipment. The next section looks at sub theme 2: Career females’ views of career retention in the ICT field.

8.5.2. Sub-theme 2: Career females’ views of career retention in the ICT field

In sub-theme 2, participants provided interpretations of their views of career retention in the ICT field. In this sub-theme, participants’ willingness to stay in a male-dominated job in the foreseeable future was examined. It examined the willingness of female ICT professionals to stay in a male-dominated job, despite the females’ different roles in work as well as their private lives. In the same sub-theme, participants’ views and perceptions of not willing to stay in a male-dominated job were also examined. This sub-theme explores the female ICT professionals who expressed unwillingness to stay in a male-dominated job.

Table 8.4 presents the frequency table of career females’ views on career retention, in the ICT field.

Table 8. 4: Career females’ views on career retention in the ICT field

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Occupational interpretations of work	(Sub-theme 2: Career females’ views of career retention in the ICT field)		
	Participants’ willingness to stay in a male-dominated job (YES)	9	56.25
	Participants’ willingness to not stay in a male-dominated job (NO)	7	43.75
Total		16	100

The participants acknowledged that the support and encouragement they received from their mentors/sponsors/supervisors guided them in terms of encouraging them to strive to achieve more and made them want to stay in the ICT sector. The idea was to seek out older and more experienced employees, to mentor them in their careers. The ICT participants reported receiving positive feedback from their counterparts, such as encouragement and kind words, and confirmed they would continue working in the industry.

Nine (9) participants stated that, they were willing to stay in the field of ICT even though it was predominantly a male-dominated field. As Participant 5 explained, *“Yes, I am willing to stay on in this field given the labour changes and opportunities for women in the South African workplace and I have invested a lot in my education.”* The participants agreed that they had worked hard, and invested in their careers, and so were willing to stay on. Other responsibilities like looking after families financially, given the harsh economic conditions, was another deciding factor as the employees cited, they could not afford to risk becoming jobless in such an environment. Additionally, Participant 1 stated that, *“I would not leave the ICT field due to the fact that I have worked hard, and I cannot start over in another career.”*

Participants who argued that they would like to move away from the fast-paced environment of ICT justified the response, by indicating a desire to start their own business. Other issues such as gender stereotypes, discrimination and time constraints contributed to the reasons why some participants would stay or leave an ICT field. Participants cited the issue of wanting to spend more time with family, and creating more time to travel, which they could not have while working in the ICT field.

There were, however, seven (7) participants who were confident that they could not stay in such a male-dominated field. This emanates from the various roles females perform in daily

life, and ICT being too fast-paced, some individuals end up having problems managing their work and private lives.

Participant 2 who stated that, *“I will definitely move away from the ICT field because it is very tiring that I have hardly had time for my family-related issues”*.

The ICT’s dynamic environment forces people in that field to constantly upgrade their qualifications, thus this presented a challenge to some of the female employees.

Participant 6 said, *“Ahh, I intend to leave this industry because I am tired of furthering my studies all the time. It’s always study, study and study. When will I live my life? It’s too much.”*

The next section looks at the sub-theme on career females’ perceptions of workplace conduct.

8.5.3. Sub-theme 3: Career females’ perceptions of workplace conduct

In sub-theme 3, participants provided interpretations of their perceptions of workplace conduct. There were two categories of career females’ perceptions of workplace conduct. The first category covered the participants’ positive views on interrelations, which explored female ICT professionals’ positive interrelations with their male counterparts within the ICT industry. The second category was participants’ negative views on interrelations with male counterparts, with this sub-theme exploring the negative interrelations of the female ICT professionals with their male counterparts within the ICT industry. Table 8.5 presents the frequency table of career females’ perceptions of workplace conduct.

Table 8. 5: Career females’ perceptions of workplace conduct

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Occupational interpretations of work	(Sub-theme 3: Career females’ perceptions workplace conduct)		
	Participants’ views on interrelations with male counterparts (positive)	11	68.75
	Participants’ views on interrelations with male counterparts (negative)	5	31.25
Total		16	100

Most of the participants (eleven participants) all indicated positive interrelations with their male counterparts. Participants indicated that their male counterparts exhibited patience, respect and consideration, treating them as equals in the workplace. The female participants stated that they were treated no different, and were not shown any special favours, as evidenced by Participant 4 who stated she was treated no different from males.

Participant 14 explained, *“My male colleagues are generous and Bayangithanda hehehe, (they love me)”*.

A very different view from previous sentiments, 5 participants made it clear that negative interpersonal relations existed in the workplace, which included stereotypical profiling of females in the ICT work environment and resulted in abuse from the males. For example, males would discriminate the females when assigning work, deliberately downplay the quality of the female workers’ tasks, as well as ignore any ideas provided by women for tasks solutions.

Participant 13 stated: *“As a female when you are too opinionated and ambitious, you are seen as a threat by the males.”*

Some of the participants shared stories of their own experiences with gender discrimination in the ICT profession. This often came in the form of comments such as undermining a lady’s ability to carry heavy equipment or ability to carry out a task from male colleagues, questioning their abilities making inappropriate comments or requests like a woman cannot do a man’s job, and most commonly, questioning their capabilities to manage both a career and family.

Participant 4 explained that, *“On a number of occasions, I have been taken off a job because some male colleagues felt that I would not do a good job.”* In addition, Participant 6 supported Participant 4 by saying, *“Yes, I also have had my technical ability and knowledge questioned by male colleagues doubting whether I can handle the business.”*

Based on the responses, sexism and discrimination were commonplace, for example; managers decided on what jobs to allocate to females, and to males, the negative comments from male counterparts questioning the females’ abilities, the inappropriate comments or requests, and most commonly, questioning the females’ capabilities to manage both a career and family. This is consistent with Regter (2018) and Shange (2018) findings, who asserted the issue of sexist remarks being a frequent occurrence in the workplace.

This concludes the results according to the first theme. The next section looks at the main theme of domestic interpretations of home.

8.6. Theme 2: Domestic interpretations of home

The way people perceive and interpret their domestic settings differs from person to person due to differences in individual preferences. Table 8.6 presents the frequency table of career females’ views of home.

Table 8. 6: Domestic interpretations of home

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Domestic interpretations of home	(Sub-theme 1: Career females’ views of home life)		
	Definitions of what home is & what it represents	4	31.25
	Boundaries of home & limitations	6	31.25
	Changes in home life over-time	6	37.5
Total		16	100

8.6.1. Sub-theme 1: Career females’ views of home life

The definition of personal life is associated with what the home represents, and the female ICT professionals’ views of what the home represents. The career females’ views of home life included what constituted boundaries of home, views on home limitations, and views on home changes over time, which influenced work-life balance. Definitions of what home life was, and what it represented, involved exploring the sentiments of different female ICT professionals, how they viewed their home-life and what home-life meant to them. Changes in home life over-time looked at the fast pace of Information and Communications Technology world, and the female ICT professionals experiencing job changes, stemming from; staying away from the job because of family commitments and responsibilities, such as childbearing and rearing, and improvement or the lack thereof specialised skills. Home representations explained how female ICT professionals understood the nexus of home and meaning experienced by female ICT professionals. The boundaries of home and limitations explored how female ICT professionals navigated through the Information and Communications Technology world, and their personal lives, and where their professional lives started affecting their personal lives, leading to work limitations.

The definition of home life explains the personal relationships outside of work, and what home life represents in terms of a place where one can indulge their hobbies, as home is meant to be a personal sanctuary, a place for rest, peace, and tranquility, away from the hassle and bustle of the work environment.

Four (4) participants all agreed they considered home to be a place where they could enjoy personal space and do personal activities which were not work-related. The comments by all the participants were perfectly captured by the views of participant 16 who stated, *“My home or private life is a place where I can rest after a long week of hard work and find sanctuary.”*

Home life commences whenever an individual arrive home and starts spending time with the family, like husband and children. However, there are limitations to a person's home life, as evidenced when some participants stated that they worked on weekends, which explained why the issue of scheduling had been affected considerably. This made it hard to balance the home life, because the participants mentioned the issue of working too much. The distinction between home and work was an essential factor, because it necessitates that workers re-establish or re-arrange their working arrangements/schedules with their employer. For four (4) participants what they viewed as home life included all activities outside of the work domain, hence the need to differentiate where the work domain ends, to make the distinction clear cut.

Participant 5 stated that, *"My home life starts as soon as I am with my family and my family because now, I have to care for them."* Participant 1 expressed that, *"My home life starts as soon as I enter the house because my children run up to me to assist them with all sorts of house-hold challenges (I feel like super-woman, hehehe)."*

The limitations of home life revolved around the issue of time. Time was regarded as a significant limitation by female ICT professionals. The issue was that participants often found themselves required to work even when they would have preferred to be at home. The limitations of home life were expressed perfectly by Participant 7 who said that *"I am always busy at work and have no time to really do what I love in my own private life."* Participant 6 echoed a similar sentiment by saying, *"I work most weekends and I really do not have enough time to myself because of this, eish."*

The next section looks at sub-theme 2 which is career females' domestic activities.

8.6.2. Sub-theme 2: Career females' domestic activities

In sub-theme 2, participants provided their home activities. The core of the responses showed that women spent more time on activities that involved others, like caring for elderly adults and children. Several responses showed some time spent on activities that were their own, like exercising, watching television, taking walks, and studying for those furthering their studies. The sixteen (16) responses are discussed in the following section. The activities at home ranged from:

- cooking,
- helping children with homework,
- doing laundry,
- clothes ironing,

- doing personal schoolwork for those participants who were furthering their education,
- exercising,
- reading books, magazines, and novels,
- taking walks with the family,
- playing board games like scrabble and monopoly with the family,
- going to the local bar; reviewing of the work schedule for the following day.

As Participant 1 stated that, *“Since my husband cannot cook, I usually cook for him and the children, whether its weekday or weekend.”*

During weekends, it was established that some participants enjoyed taking time off to sleep on Saturdays, and prepare for the coming week on Sundays, by making all the necessary arrangements for the coming week. Participants 2 and 4 indicated that weekends were reserved for family gatherings, outings, funerals, weddings, and families. Five (5) participants mentioned that they usually worked even on Sundays.

One (1) participant said that she usually did spring cleaning of the house, as weekend was the only time she had in her busy schedule. Four (4) Participants shared similar sentiments indicated that they did laundry on Saturdays, then on Sundays prepared their work for the coming week.

Participants 10 and 13 mentioned that during the weekends they usually used the time to catch up on unfinished work they should have completed at the office. Participant 13 emphasised that, *“I get to catch up on work because Thursdays and Fridays are reserved for meetings, so I do not get much done at the office because, man, I am so busy, and I lose two days of the week.”*

As much as all the above participants engaged in various home activities during the weekends, it was essential to note that some still dedicated a part of their time to doing their professional work at some point during those weekends. The responses gave strong evidence of work-to-life interference. The next section looks at sub-theme 3: Career females’ time allocations to domestic work.

8.6.3. Sub theme 3: Career females’ time allocations to domestic work

The third sub-theme covered participants’ time allocations to domestic work. This was further broken down into the specific household chores. The participants outlined their time allocations for home activities. The domestic responsibilities were as follows: cooking, laundry, house

cleaning, bathing the young and caring for the elderly. Table 8.7 depicts the different time allocation for the different activities that the participants performed at home.

Table 8. 7: Participants’ time allocations to domestic work

Main theme	Sub-theme (s)	Time allocations	Frequency	Percentage (%)
Domestic interpretations of home	(Sub-theme 1: Career females’ time allocations to domestic work)			
	Cooking	1 hours or >	3	18.75
	Laundry	2 hours or >	3	18.75
	House cleaning	3 hours or >	4	25
	Bathing the young	4 hours or >	3	18.75
	Caring for the elderly	5 hours or>	3	18.75
Total			16	100

The third sub-theme was participants’ time allocations to household work. This was further broken down into specific household activities. The participants outlined their time allocations for the activities at home. Table 8.7 above depicts the different time allocations for the different activities which the participants performed at home. Time allocations were categorised and the aspects identified are as follows:

- Cooking: All activities that involved meal preparation for the household members.
- Laundry: All activities that involved washing and ironing clothes for the household members.
- House cleaning: All activities that involved cleaning and maintaining the household.
- Bathing the young: All activities that involved washing those young children who cannot bathe themselves.
- Caring for the elderly: All activities that involved the care of the elderly who cannot care for themselves.

As indicated by responses from married women, and unmarried women with children, in the interviews, the allocated cooking time revealed that they spent more or less the same amount of time on the care of their children.

As part of the sub-theme named career females’ domestic work allocations, participants revealed the following.

Participant 11 allocated cooking time of one and a half hours, participant 10 had 1 hour, and participant 12, who was single, had 2 hours. Time spent represented total activities done in any

given day, because no matter how a person divides their time, there are only 24 hours in a day. Some people only managed to do half the amount of work they set out to do, compared to people who consistently accomplished more than those others within the same allocated number of hours in a day, which raised questions on such a scenario. However, acknowledging the importance of finding ways to best manage time, which is a limited resource, was the first step toward good time management, and then applying those strategic ways to test if they worked and their effectiveness was the second step.

With laundry, there was a difference between those individuals who had technological assistance, access to a washing machine, as evidenced by the reduced hours spent by Participant 4, compared to Participant 5, who had no access to a washing device thus had to wake up early to hand-wash all the family's laundry.

Given the way gender roles are well defined in today's life environment, women are often being responsible for a lot more domestic work than men. The balance between work and home is one that participants admit required mastering. Some participants in the interview stage came up with a concept, concentrating on the '*Most Important Areas or M.I.As.*' The participants stated that the idea was to find a way to spend time efficiently and effectively, on essential areas, for example; focusing on shared spaces like the kitchen, which obviously needs more attention, as it is more commonly used than the rest of the house. The other rooms may accumulate dirt but can be easier to keep clean; for example, the living room area on a typical day may only be fully utilised in the evenings, after returning home from work. As Participant 3 stated, she usually spent three and a half hours on house cleaning, based on the fact that dirt accumulated over the long course of a whole week.

Other participants had help from family members in terms of regular sharing of the house cleaning chores. Participant 1 stated that, "*I spent about 2 hours cleaning with a little help from my 13-year-old daughter.*"

Participants admitted that it was not easy being a career woman, and a domestic female. Most women at Telkom possess a multi-tasking ability which is truly a commendable trait. Not only were these women looking after their homes, but they were also busy climbing the professional ladder, especially in a field such as Information and Communications Technology that is fast paced. With bathing the young, participants indicated that they spent anything from 1 hour to 2 hours, based on the number of children that needed to be bathed, and the age of the children. The young ones did not take up too much time to bath, compared to the older ones. Three (3)

participants spent, on average, 2 hours, and it had to be noted that the children’s age was important in determining the amount of time spent on this activity. It too shorter for younger children because the carer performs every aspect of this activity in comparison to older children who can perform some aspects of the bathing activity

Table 8.7. depicts that the aspect of care for the elderly had participants required more hours than the other aspects. Participants who cared for elderly parents stated that; they had to spend much time on that aspect because older people required more time for their care. The sentiment was this could be stressful and financially draining.

Participant 16 stated that, *“Since my elderly mother is physically challenged, I spend over 6 hours tending to her cares.”* Participant 15 stated that, *“I spend 4 hours looking after my diabetic dad who needs constant monitoring.”* Participant 14 mentioned that, *I spend 5 hours more or less looking after granny, she is fussy about what she eats (laughs).”*

The next section looks at the fourth sub-theme which is career females’ different home roles.

8.6.4. Sub-theme 4: Career females’ different home roles and time management

What is evident from this study is that females adjust their schedules and make compromises when the needs of the home interfere with work. This is because of the multiple roles the women have to play in life. Sub-theme 4 was the participants’ time management, further divided into three sub-themes. The participants outlined their time management in terms of home chores, given the nature of their professions.

All the participants indicated some challenges in terms of time management, given the nature of their profession. The three challenges that stemmed from their roles at home were; car-giver, homemaker, and special activities dedicated to self for own fulfillment. This impacts decisions at work, in that many of these females become reluctant to take on more responsibilities, especially in the form of leadership roles, as this would impact their time scheduling at home. Three broad roles were identified in this section and, Table 8.8 shows career females’ different home roles.

Table 8. 8: Career females’ different home roles

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Domestic interpretations of home	(Sub-theme 4: Career females’ different home roles)		
	Caregiver	7	43.75
	Homemaker	2	12.5
	Personal role	7	43.75
Total		16	100

The roles are briefly described in the following section:

- Caregiver: The role assumed by the female ICT professionals in the family, in regularly looking after a child or a sick, elderly, or disabled person.
- Homemaker: The role assumed by the female ICT professionals in the family in managing the household affairs.
- Personal role: This encompassed all those activities the female ICT professionals do for themselves, for example, hobbies.

According to the data from the study, women often put their careers ahead of their families, opting to prioritise their careers. A person’s decision-making is affected by this factor. Women may elect to stay at home or pursue a career for work-life balance reasons when caring for children. It could also impact opportunities, career advancement, time management, and advancement. The caregiver’s role was intriguing. It is more challenging for females who were the caregivers for their spouses, children, and elderly relatives. Therefore, their time management was impacted. Participant 3 stated that, *“I have to make provision make sure my children have clean clothes as well as take care of my husband.”*

In relation to care for elderly persons Participant 15 stated that, *“I make time to clean and cook for my elderly father who I have mentioned is diabetic and needs to be looked after.”*

This already meant that this individual was spending more time caring for other people in the household, than on herself. How she managed her time was dependent on her ability to split the activities, and utilises time effectively.

The homemaker’s role appeared more appealing to women who were mothers, as this was the core of their identity, they were more dedicated to making their children thrive, and believed that only they could fulfill that function. For those that were not mothers, the focus was a lot more centered around their careers. Nonetheless, all the women expressed the sentiment that

females had a more significant role in life than men, which impeded the aspects of balancing time.

Participant 16 stated that, *“The home-maker role presents a serious challenge to the career woman as she tries to perform the demands of home-role as well as the demands of the work role.”* The personal role indicated that time management challenges stemmed from the amount of time spent doing their own activities. The career woman’s interests impact time allocation of roles in her life, and attempting to establish harmony between personal roles, in terms of personal interests, and for example, others’ interests, which is essential for the career woman. However, given that life is complicated, and sometimes highly unpredictable, it is not easy to strike that harmonious balance.

Participant 15 explained, *“I create a to-do list for the next day and I usually have to fit in other peoples’ activities and schedule in mine. That takes a lot of time, I must say.”*

8.6.5. Sub-theme 5: Career females’ lives regarding the use of ICT and Internet

The participants acknowledged that the Internet and Information and Communications Technology had provided the women with access to new incredible jobs and professions, which have enhanced their personal lives. The use of ICT and the Internet made both home and work life much more comfortable. However, the complexities of ICT and the Internet still need to be acknowledged. An example was the issue of working from home and having a family. That was hard, especially for employees with young children. Two aspects were identified, as depicted in Table 8.9.

Table 8. 9: Careers females’ lives regarding the use of ICT and internet

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Domestic interpretations of home	(Sub-theme 5: Career females’ lives regarding the use of ICT and internet)		
	Ease of working with ICT and Internet	11	68.75
	Complexities of working with ICT and Internet	5	31.25
Total		16	100

The two aspects are briefly stated in the following section:

- Ease of working with ICT and Internet: The participants had to indicate how easy they found working with ICT and Internet-related tasks.

- Complexities of working with ICT and Internet: The participants had to indicate the complexities they found working with ICT and Internet.

All the participants stated that ICT and the Internet had made life much easier being able to work anytime, and anyplace. ICT and the Internet provided an effective communications system via emails, instant messaging services to any part of the work network, thus improved business interactions which saved on time.

Participant 4 explained, *“I enjoy the flexibility it allows me when I am dealing with programming issues, all I need is internet connection and I can work anywhere at any time.”*

However, participants also revealed some complexities associated with working with ICT and the Internet. The Internet and ICT had seriously impacted daily life in that it had been seen to be distracting for some employees, making them lose focus and concentration on the job at hand. The other complexities associated with working with the Internet had to do with technology failure, which all participants agreed on, mostly to do with the issue of load shedding, which sometimes affected telecommunication towers. In South Africa and many parts of Southern Africa has had a power deficit resulting in planned blackouts to ease the strain on the electricity resources. The Electricity Supply Commission (ESCOM), also known as the *Electricity Voorsienings Kommissie* (EVKOM) in South Africa, introduced rolling blackouts in 2008, based on a rotating schedule when supply was insufficient. Because of inadequate capacity or to prevent a countrywide blackout, load shedding involves cutting off parts of South Africa’s electric grid. Load shedding continues up to today in 2021. Participant 12 stated, *“My job is that of a technician and if the Internet has a problem, I will not perform my work, that is what is bad about my job.”*

This concludes the results on the second theme of domestic interpretations of home. The next theme is Theme 3: Interpretations of work-life synergy.

8.7. Theme 3: Interpretations of work-life synergy

This central theme is in accordance with interpretations of work-life synergy by the female ICT professionals. The way people perceive and interpret their domestic settings differs from person to person due to individual differences. Table 8.10 presents the frequency table of career females’ perceptions of work-life balance at Telkom.

Table 8. 10: Career females’ perceptions of work-life balance at Telkom

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Interpretations of work-life synergy	(Sub-theme 1: Career females’ perceptions of work-life balance at Telkom)		
	Interpretations of work-life synergy	16	100
Total		16	100

8.7.1. Sub-theme 1: Career females’ perceptions of work-life balance at Telkom

As seen in Table 8.10, all sixteen (16) participants could interpret what work-life balance meant. All the participants agreed that the concept of work-life balance, revolved around their ability to balance their work and life aspects. It also meant aspects like personal interests, family, social, and leisure. The participants also indicated that once a balance over life and work was achieved, they were much happier and more productive. The ability to differentiate between home and work aspects was shared among all the women in this section.

The other common theme was the difficulty that comes with achieving work-life balance. Participant 1 explained, *“Whenever I see or hear work-life balance, I think of one’s ability or attempt to balance [wait, I am allowed to use the word balance, laughs] the work aspect and the private aspect.”*

This captured the use by other participants of the expressions the ‘ability’ and an ‘attempt’ to balance personal life and work life. This clarified the point that sometimes a balance could be achieved, while other times it may be attempted and not achieved.

Participant 12 said, *“I have a problem with this work-life balance especially in my field of work. How do I achieve that when I do not stop working as I build my career? I feel the day I reach a senior position is the day I will be able to have true work-life balance.”* This expression gave an opposing view of what some female ICT professionals interpreted as work-life balance. It revealed that some individuals might not achieve balance because of their personal nature toward work, which could be responsible for them spending more time on certain aspects over others, thus creating an imbalance.

The next section looks at sub-theme 2: Career females’ perceptions of work-life balance on management of career and personal life.

8.7.2. Sub-theme 2: Career females’ perceptions of work-life balance on the management of career and personal life

This theme focused on the management of careers and personal life by female ICT professionals. All participants acknowledged that it could never be easy for them to manage a career as well as a personal life. This came with bouts of stress and guilt over not affording their loved ones enough family time, especially for women with children. That said, the participants were all in agreement that 21st-century women from the Information and Communication Telecommunications sector, and from all walks of life were taking advantage of career opportunities. However, that rewarding career still came at a cost, the challenge of not having enough time for self and their families. Table 8.11 shows the participants’ management of career and personal life.

Table 8. 11: Career females’ perceptions of work-life balance on management of career and personal life

Main theme	Sub-theme (s)	Frequency	Percentage (%)
Interpretations of work-life synergy	(Sub-theme 2: Career females’ perceptions of work-life balance on management of career and personal life		
	Balance between their private and career lives	14	87.5
	No balance between their private and professional lives.	2	
Total		16	12.5

The majority of the participants, 14, indicated they balanced their personal and professional lives. The common theme that emerged was that the organisation provided family-friendly policies, which enabled them to have the balance they needed. 2 participants stated that they were struggling with balance, due to issues related to the number of responsibilities they had at home. Their families expected them to do most home chores, which left them exhausted, thus impacting their performance at work.

The participants adopted the idea of focusing on the ‘*Most Important Areas or M.I.As,*’ as outlined in the career females’ time allocations to domestic work sub-theme. As women strive to balance the two spheres of life, all the participants acknowledged the difficulty to achieve a balance, and therefore shifted the focus on how well one manages the two areas, which can make a significant difference to work or personal life.

Participant 1 stated, *“I normally look at the importance in terms of work activities at work. This makes me achieve more and I then have enough time to do my private matters.”* The participants also mentioned the aspect of taking time off to rest. Some responses showed that the participants valued a balance of work and personal lives and made good use of all holidays provided by their organisation. This helped reduce conditions of exhaustion and stress.

The next section looks at sub-theme 3, on career females’ perceptions of ideal/ perfect balance at Telkom.

8.7.3. Sub-theme 3: Career females’ perceptions of ideal/ perfect balance at Telkom

The sub-theme on career females’ perceptions of ideal/ perfect balance showed there was no such thing as a perfect balance. The participants stated that these were aspects that increased the stability of the balance. Females, often being the primary household managers, have to give so much more in terms of time, which often leaves them with little or no time at all for themselves. Participants 2 and 3 stated that their ideal balance would be a set-up where they can work freely, have supportive superiors, support from the organisation, do what they love at home, and experience happiness at work from enjoying what they do. Three (3) participants all acknowledged the support of the organisation and their superiors. Participant 10 explained, *“I am able to ask for leave or days off to attend to my personal issues and this gives me space to balance my work and home life.”* Participant 4 stated, *“I love this organisation (Telkom) because it assists me in doing my work and strike a balance with my home life whenever the need arises.”*

From above responses, it is clear that an ideal balance would encompass elements of flexitime, related to the participants ‘need for; supportive supervisors, the ability to pursue personal ambitions, and passions, and the organisation’s ability to support workers in many other work-related aspects. This translates into the ideal balance when employees are happy at work; they are happy at home.

The next sub-theme looks at sub-theme 4, Career females’ work-life integration at Telkom.

8.7.4. Sub-theme 4: Career females’ work-life integration at Telkom

This theme focused on whether the organisation was doing enough to accommodate women, in terms of work-life balance, which brought out much concern among participants. As seen from the use of the **Telkom Touch** and the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, as an organisation, Telkom understood that the lack of

employment policies to accommodate working parents, women, and all the other different persons under their employ could force individual employees to choose between job security, and parenting, or other individual personal needs. Due to the nature of societal norms, the general responsibility for family caregiving is often left for the women. Employment standards that only accommodate one particular gender will breed a culture that encourages discriminatory practices; employers against certain employees, and employees amongst themselves. The work-life integration at Telkom was viewed through the policies outlined in Chapter 4, namely; the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and ***Telkom Touch***.

The sixteen (16) participants all shared the same notion that Telkom did indeed encouraged their integration into Telkom. Participant 1 explained that, “Yes, *the organisation has put in place programmes to assist women with little children.*”

Six (6) other participants expressed similar sentiments regarding the support they received; the organisation provided special days off work for parents with small children. From the responses, employees appreciated Telkom’s supportive policies which made their work lives more conducive to better productivity.

8.7.5. Sub-theme 5: Career females’ experiences of work-life integration at Telkom

Sub-theme 5 looked at career females’ experiences of work-life integration at Telkom; it explored the participants’ views on the long-term possibility, and long-term impossibility, of a balance between personal life and career. Work-life integration explores the synergy between all aspects of work, life, home, family, personal well-being, and health. Table 8.12 depicts career females’ experience of work-life integration at Telkom.

Table 8. 12: Career females’ experiences of work-life integration at Telkom

Main theme	Sub-theme(s)	Frequency	Percentage (%)
Interpretations of work-life synergy	(Sub-theme 5: Career females’ experiences of work-life integration at Telkom)		
	Long-term possibility of achieving a balance	11	68.75
	Long-term impossibility of achieving a balance	5	31.25
Total		16	100

Eleven (11) participants indicated that there was a long-term possibility of achieving a balance between personal and career life. Participant 2 expressed the same sentiments as the others, stated that *“The long-term possibility between private life and career was possible because there are more women entering the work-place and this is leading to Telkom having to accommodate them.”*

As stated earlier in Chapter 2 of this study, South Africa has put in place legislations that aid in issues of gender, however, male dominance discrimination tendencies are an aspect that needs serious redress. This is supported by the Basic Conditions of Employment Act 75 (1997) in South Africa.

Five (5) participants cited long-term impossibility of achieving a balance between personal and career life.

Participant 4 explained that, *“If gender stereotypes and discrimination are completely gotten rid of, then women will feel that they are appreciated and will perform well in organisations which will also be good for their private lives.”*

What stood out more was the issue of gender stereotypes. Participant 1 stated that *“As long as there are stereotypical attitudes in society, long term balance is impractical.”*

The next section looks at sub-theme 6: career females’ outlook on work and life and management of flexible labour time, and its arrangement at Telkom.

8.7.6. Sub-theme 6: Career females' outlook on work-life and management of flexible labour time arrangements at Telkom

All the participants (16) indicated that the company was flexible with where the participants worked, had special or flexible arrangements, and was flexible on their labour requirements. The participants all stated that it was necessary as this gave them enough time to rest and perform optimally. The management of flexible labour time, and its arrangement at Telkom, were explored in line with Telkom policies, discussed (See: Chapter 5), the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, and the **Telkom Touch**. As expressed by Participant 9 who stated that, *“The South African labour market is highly regulated and the employment legislations in place provide protection of the employee and so the general outlook of employees at Telkom's work-life and management of flexible labour time is favourable.”*

8.8. Conclusion

Chapter 8 presented Stage 3: Qualitative study for the present study. The data analysed was synthesised from 16 individual in-depth semi-structured interviews; a sample was deemed adequate for the generalisability of the findings to the total population. The responses represented a response rate of 100%, which was also deemed acceptable for an online survey. As this study utilised a mixed methods research design, a synthesis of the findings from the document analysis of the Telkom policy and programme, stages 1, 2, and 3 are presented in the next chapter (Chapter 9). This was done to identify the themes associated with work-life balance experiences of female Information and Communications Technology at Telkom.

Chapter 9
Discussion of Results

9.1. Introduction

As this study adopted a mixed methodology research design, this chapter integrates the four stages’ findings to discuss the themes that emerged through this research.

Stage 1 was made up of the secondary data collection stage and presented the secondary data collection phase of the study covering Aim 1, research objectives 1. In this stage, programmes, and policies which served as secondary data were collected from the organisation.

Stage 2 of the study made up of the quantitative study. The online survey, the “*Work-Life Balance Study Employee Survey*,” was distributed to female ICT professionals at Telkom Headquarters in Pretoria. The frequency of usage of the Telkom policy and programmes was explored here. For this study, the focus was on Telkom Headquarters in Pretoria.

Stage 3 of the study outlined the qualitative stage. The section presented the results according to the interview schedule and its link to objective 4 of the study.

In exploring the Life Course perspective by Giele and Elder (1998) and Border Theory by Clark (2000), an understanding of females’ careers and ICT experiences was sought. The debate centered around life events such as family relationships, educational choices and achievements, family formation, labour market participation patterns, and decisions, separately, how they influence women’s ability to engage in ICT. The influence could be in ways that differed substantially from men’s, and which have a decisive impact on their careers—taking the theoretical framework, aims, and objectives of the study into consideration, Table 9.1. depicts the following themes, identified to provide an in-depth discussion of the findings of this study:

Table 9. 1: The themes identified to aid the study’s discussion

Theme identified	Name of theme
Theme 1	The awareness and utilisation of Telkom’s work-life balance organisational policy and practice by female ICT professionals.
Theme 2	Female ICT professionals’ interpretations, challenges and benefits of work-life balance.
Theme 3	Female ICT professionals’ experiences and perceptions of work-life balance.

Discussions of findings under each theme, were undertaken, with reference to previous studies, to support or highlight variations in the interpretations of the phenomena under investigation.

9.2. Theme 1: The awareness and utilisation of Telkom's work-life balance organisational policies and practices by female ICT professionals

This theme focused on Telkom work-life balance organisational practices, and how Telkom employees were aware, and utilised the available work-life balance organisational practices. The Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the ***Telkom Touch*** were the two organisational practices examined under this theme.

For the collection of the secondary data, this theme focused on the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, which identified all work-related aspects, data obtained from Telkom HRIS over nine months from January to September of 2018. In the secondary data stage, Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and virtual assistance programme, Telkom Touch, collected from the organisation on work-life, were examined, exploring the frequency at which employees utilised them.

The next section discussed awareness and utilisation of working timetables at Telkom. This section focused on the following aspects:

- The awareness and utilisation of working timetables at Telkom: Workweek
- The awareness and utilisation of working timetables at Telkom: Flexible work hours' option
- The awareness and utilisation of working timetables at Telkom: Reduced workweek option
- The awareness and utilisation of working timetables at Telkom: Hours of work
- The awareness and utilisation of working timetables at Telkom: Meal intervals.

In line with consistency to international standards, it was essential to note that the International Labour Organisation also covered working time and organisation, these included:

- Reduction in long hours and overtime
- Work schedule predictability (e.g., overtime, shift work)
- Part-time with pro-rata entitlements as per the ILO Part-Time Work Convention, 1994 (No. 175)
- Flexitime.

The first aspect related to the findings associated with utilisation of Workweek.

9.2.1. The awareness and utilisation of working timetables at Telkom: Workweek

This study's document analysis revealed that a workweek was designed to fit into a 42-hour week, and a traditional workweek at Telkom entailed Monday to Friday office hours of 07:30 – 16:30, with core times covered there. Findings from Stage 1 of the study, as observed from Chapter 6 (Table 6.2) from a month-to-month comparison over the nine months of 2018, most of the employees did observe the 42-hour traditional workweek, and the traditional workweek of Monday-Friday, with office hours of 07:30 – 16:30. Telkom workweek was designed to adhere to the labour laws in South Africa.

This was consistent with a study by Geldenhuys (2016) and the Labour Relations Act 66 of 1995, which found that most females' work hours fell between 40-45 hours per week, equivalent to an average South African work week.

Further findings from Stage 1 of the study revealed that respondents were mostly inclined to observe the standard workweek of 42 hours, with an average of 1.38 for every respondent, confirming that the respondents tended to observe a traditional workweek over the nine months amounted to an average of 12.44. This is supported by Strazdins et al. (2006), who stated that it is evident that there has been a redefinition of the working week. The standard work schedule of 5 days/ week, eight hours/day during the regular hours of 8 am–5 pm, no longer applied to many workers. There were several variations of this regular work schedule, including individuals working fixed evening, or night shifts, split shifts (two distinct periods in each workday), or rotating shifts. A move to service-based economies, and changes in trade practices had led to an increase in shift work.

The next section discussed the flexible work hours' option at Telkom.

9.2.2. The awareness and utilisation of working timetables at Telkom: Flexible work hours' option

In terms of flexibility, findings from stage 1 showed most employees at Telkom utilised the flexible hours' option, as shown in Chapter 6 (See figure 6.2), which presented findings for the period January to March with 80.6%, compared to 19.4% of employees not utilising flexible working hours. The period April to June 2018 also showed that 70.4% of employees utilised flexible hours compared to 13%, not utilising the flexible working hours. The period July to September 2018 indicated a 90.1% statistic of employees utilising the flexible working hours, compared to 7.2% who did not utilise the flexible working hours. This use of flexible work hours was supported by Marafi (2016) & Shagvaliyeva and Yazdanifard (2014), who found

that flexible working practices benefited both employee and employer. Hence, the introduction of flexibility to the workplace to assist employees with children, or employees who cared for siblings, manage their time between work and life. Furthermore, Shagvaliyeva and Yazdanifard (2014) found that, as flexibility gave an employee the ability to control when, where, and how much time they worked, it contributed to improvement in the allocation of work and life responsibilities. Thus, an employee could end up fulfilling his/her work, and non-working roles well and more quickly.

Findings from Stage 2 showed that the respondents stated that; the fact that policies regarding work-life balance were communicated to them helped them achieve a work-life balance. The respondents indicated that flexible working allowed them to fulfil roles at home and work, which went on to showcase how good and quickly an employee could adapt to any work situation. The results of this study are consistent with a previous study done by Rau and Hyland (2002) reported that flexibility in flexible work schedules or work processes could counter problems stemming from work-family conflict as well as organisational time demands.

The results could be explained as the ability to easily adapt explained that a flexible person could therefore achieve any goal without fear or favour, thus the ability to enhance and increase their performance, as evidenced by the fact that targets were actually met. This was revealed through the relationship of awareness of policies and multiple demographic variables such as:

- Age,
- Race; and
- The number of children under the age of 18 living at home.

Age: There was an indication of awareness of policies by all age groups. This variable revealed that relatively older respondents in the age groups 36 to 40 and above 41-50 (Mean=3.83, 4.13) lower scores cores than younger respondents in other age groups (mean=4.00, 4.56, 4.80). It also revealed that the two groups had the lowest score, 36 to 40 mean (3.83) and the 60+ group also a low mean (3.92). However, the age group that utilised the organisational practices more was the 31-40 year, which was relatively young.

The findings of this study are consistent with Facer, Wadsworth, and Arbon (2009) and Wise and Bond (2003), who have found that having alternative work schedules leads to organisations attracting and retaining younger talented employees. They are aware of the jobs that require flexibility more than older workers. Work-life initiatives that allow them to work multiple jobs also permit them to easily move from one job to the next.

Race: As the findings revealed, the awareness of White respondents and Black respondents both at a mean (Mean=2.80) was higher and differed from the Mixed-race respondents (Mean=1.97). The Mixed-race respondents, although aware of the Telkom work-life balance policies, the awareness was not at the same level as Whites and Blacks.

The number of children under the age of 18 living at home, and awareness of Telkom work-life balance policies: Women with children considered this to be very important while women without children did not. This revealed that women with children under 18 years perceived a stronger positive relationship from the usage of any family-related benefits, than women without children under 18. The results of this study challenge previous studies done by Fried (1998) & Hochschild and Machung (1989), who found that even the availability of comprehensive and generous work-life policies, did not necessarily result in widespread utilisation by employees.

Based on these demographic variables, whether one was old, middle-aged or older, White, Black, or Mixed-race, or had children under 18; awareness of policies led to their usage. The findings were supported by Thompson et al. (1999), who found that flexible working hours had been introduced as a benefit for employees with caregiving responsibilities to parents, to assist them in fulfilling work and life responsibilities thus achieve work-life balance. Thomson et al. (1999) demonstrated a link between work-life balance initiatives that benefit employees with under-18 children and knowledge/awareness of those initiatives. In addition, Tipping, Chanfreau, Perry, and Tait (2012), in their work-life balance survey, found that employees believed that flexible working practices improved workplace morale, which could positively influence work-life balance. In this study, besides, employees believed that the employer could actually help them balance their work and life roles. The awareness and usage of the available programme and policy in the current study showed employees looking after their wellbeing. This is supported by Pruyne et al. (2012), who illustrated that flexible working hours was one of the best concepts to improve employee wellbeing, as it assisted employees in dealing with responsibilities outside the workplace. The study by Fischer et al. (2015) also supports the current findings in that it looks at how organisations look after the welfare of their employees by ensuring that their employees are made aware and use the available work-life balance initiatives.

The next section looks at the reduced workweek option at Telkom.

9.2.3. The awareness and utilisation of working timetables at Telkom: Reduced workweek option

This study's document analysis revealed that the reduced workweek meant a 5-to-8-hour days, or 25-hour workweek on a 5-hour per day basis. Findings from Stage 1 revealed that most Telkom staff utilised the reduced workweek as shown by findings from the interval periods January to March 2018, April to June 2018, and July to September 2018. Throughout the periods the majority of employees, utilised the reduced workweek option. The composite responses for the full nine months amounted to 4.08, with an average of 1.36 for every respondent, affirming that the respondents were more inclined to opt for reduced workweek, which implied the females' utilisation of the reduced workweek. This is in contrast with findings by González et.al. (2016) that show that 9.8 % of women would accept a reduction in working hours compared to 4.6 % of their male counterparts, and 56.7 % of men would be willing to accept working more hours than women in the ICT sector. Results from the study indicate that women have different ideas about how many hours they should work at work, which may have been influenced by the dual role they have to play in life - homemakers and employees.

Findings from Stage 1 revealed the usage of a reduced workweek by employees, which was consistent with the Basic Conditions of Employment Act 75 (1997), explained as a compressed working week. This allowed for some flexibility in the scheduling of working hours, by agreement between the employer and workers (collective agreement), or one worker (individual agreement), enabling employees to do up to twelve hours of regular work on any given day, without receiving overtime pay. However, the employees' working hours remained regulated; not more than forty-five regular hours per week, and not more than five days in a week. For consistency with international standards, the International Labour Organisation (ILO) provided, Reduction of Hours of Work Recommendation, 1962 (No. 116) which outlined the standard for the forty-hour week, the principle was set out in the Forty-Hour Week Convention, 1935, as a social standard to be reached in stages if necessary and setting a maximum limit for regular hours of work.

This above finding is also in line with the Telkom Integrated Report (2018) which outlines the creation and usage of the wireless open-access network, wholesale open-access, rapid deployment of infrastructure. The Electronic Communications Act Amendment Bill gives guidance to how aspects should be utilised abiding by time frames and schedules. Other studies by Kaur (2015) and Jamison et al. (2009) are also consistent with the current study findings was the notion of ICT being rapidly revolutionary, allowing for employees to work anywhere.

The next section looks at the hours of work option at Telkom.

9.2.4. The awareness and utilisation of working timetables at Telkom: Hours of work

This study's document analysis revealed that an employee might not be required or permitted to work more than 42 hours in a week, or more than an average of 5 hours' overtime in a week, averaged out over 4 to 8 weeks. These working hours were adhered to, in order to reduce over-working, and work-related pressure on employees in the dynamic Information and Communication Technology sector. This is supported by Armstrong et al. (2007) & Valk and Srinivasan (2011). They stated that long working hours for women created additional pressure due to uncertainty and instability in the ICT industry.

Findings from Stage 2 presented the number of hours per week spent by the respondents on any work-related activities, and it was found that the majority of respondents comprising 36% spent 40 hours per week. 34% of the respondents indicated 40 to 50 hours. Twenty-six percent (26%) of the respondents spent 51 to 60 hours, and four percent (4%) of the respondents stated 70 hours and over. Participants indicated that the more hours they spent at work, the less time they had for family, and other activities outside work (See Table 6.15). In the findings, most of the respondents worked 40 hours per week, which confirmed adherence to the stipulation as per section 9 of the Basic Conditions of Employment Act 75 (1997) of South Africa, that the normal maximum working time for an employee above the threshold is 45 hours per week. This would mean a maximum of nine hours per day, if the employee worked for five or fewer days in a week, and eight hours per day if the employee worked more than five days in a week.

The next section looks at the meal intervals at Telkom.

9.2.5. The awareness and utilisation of working timetables at Telkom: Meal intervals

This study's document analysis revealed that, at Telkom, meal intervals were strictly set to specific periods, as a meal interval only had to be provided after 5 hours of continuous work. The responses over the nine months amounted to average of 16.78 hours, with an average of 1.86 hours for every respondent, confirming that the respondents were more inclined to utilise meal intervals after 5 hours' continuous work. This was in line with Section 14 of the Basic Conditions of Employment Act 75 (1997) of South Africa, which stipulates that an employer must give an employee, who works continuously for more than five hours, a meal interval of at least one continuous hour.

Findings from Stage 1 of the study also indicated that most employees did not have set meal intervals, as they had their meals while engaged in the work. Most of the participants stated that, in theory, they had a flexible time policy for meals at work, and they tried to work around the huge workloads by multitasking, eating and working at the same time, in an effort to meet deadlines, and achieve organisational goals. The current study's findings confirm a study by Randolph (2016) who explored the aspect of work breaks revealing that fewer than half of employees surveyed say they take a lunch break away from their desk on an average day.

The next section looks at the use of working elements at Telkom. This section looks at the following aspects:

- The use of the working element at Telkom: Working from or closer to home
- The use of the working element at Telkom: Shift work and changing shift schedules option
- The use of the working element at Telkom: Overtime
- The use of the working element at Telkom: Call-out (also referred to as *T-421*) system
- Work on non-standard days/times at Telkom: Sundays.

The following section provides a discussion on the findings relating to the use of the working element: Working from or closer to home at Telkom.

9.2.6. The use of the working element at Telkom: Working from home or closer to home

Findings from Stage 1 indicated that the reason participants preferred to work from home, was that they were not constrained by a set schedule and were also able to perform some home related activities, as supported by Wheatley (2012), who noted the same benefits with employees able to schedule the day around home responsibilities. However, a study by Song and Gao (2018) found a result concerning job satisfaction is lower, and that working from home increases stress.

Nevertheless, homeworking could lead to continuous contact between the employee and his work environment given the ease of accessibility at any time. De Maar (2019) mentioned the fact that globalisation had increased in businesses, virtual work had therefore become a reality, so working anywhere and anytime was a contemporary feature of work today. In line with the findings by JCSE (2016), internet has become part of everyday work-life and cannot be separated from the new world of work, the findings of this study are consistent due to the fact that employees can be able to work from home or closer to home.

Workers in the 21st century are in instant touch with both work and family with the new technological gadgets. Homeworking has greatly enhanced time/space flexibility, and the use of professional communication tools like emails brought accessibility in partnership and sharing of work

Further findings in stage 1 indicated that some employees did not prefer to work at home on a full-time basis, citing the issue of missing out on work opportunities at the office, and as Johns and Gratton (2013) confirmed, while employees could gain in some areas through working from home, there were also some negative consequences to be considered. Johns and Gratton (2013) maintained that an employee's career progression, and leadership development might suffer from not being based in the office. Another finding by Richardson (2010) confirmed employee's concerns of negative impact on their career progression, and relationships with superiors due to working from home. Rogers (2011) suggested a helpful attitude might somewhat help overcome any such difficulties – being flexible and open to additional work, and assisting colleagues, could go a long way. Hence, it could be argued that those working from home may need to put in more work, than their office-based colleagues, to prove themselves. This could be the sacrifice to be made for the privilege of home-based working.

The following section provides a discussion on the findings associated with the use of the working element: Shift work and changing shift schedules option.

9.2.7. The use of the working element at Telkom: Shift work and changing shift schedules option

This study's document analysis revealed that shift work meant work comprising a relay of periods of duty and "averaging hours of work." This meant that an employee might not be required or permitted to work more than 42 hours in a week, or more than an average of 5 hours' overtime in a week, over the agreed period, averaged out over 4 to 8 weeks. Measured over nine months over three-month intervals, all periods revealed an inclination towards the lower hours of 5 and 6. The results were as follows: January-March period ($m=2.36$), ($sd.=1.139$), April-June ($m=9.01$), ($sd.= 2.38$) and July-September ($m=2.28$), ($sd.=1.031$).

Findings in Stage 1 for the changing shift schedules for the nine months, showed an inclination towards changing shift schedules. The shift work, and changing shift schedules working element, was in line with the Basic Conditions of Employment Act 75 (1997) under Section 4 of the Code of Practice for the Arrangement of Working Time of South Africa. The elements of design and evaluation of shift systems, arrangement of shifts, design of shift rosters, were essential here, revealing that the design of shift rosters had to be sensitive to the rosters' impact

on employees and their families. Studies by Thrash and Warner (2016) & Bernardi and Klärner (2014) support the current study's finding which explored the relationship between work and home life in terms of balancing the two domains by the utilisation of available working options and the effect this has on families. Thrash and Warner (2016) & Bernardi and Klärner (2014) concluded in their study that a change in work shifts may upset a balance in the other domain of private life and employees adjust according to the available shift schedules available to them in their organisation.

Other findings from Stage 1 indicated that employees were using more planned schedules, as compared to inadvertent schedules. This was supported by Gilson et al. (2014), who stated that, due to the advances in technology, executives were expected to be on call, to provide immediate solutions to problems that could arise at work and this in itself is a shift in terms of work. In their article, Gilson et al. (2014) suggest that if employees are aware of their organisation's call or duty schedule, they will be more likely to plan their lives, work or personal, accordingly. Besides, Sears and Galambos (1992) found that work schedule inflexibility, and more significant work hours, led to a more negative spillover effect for women. From the findings of this study, the changing shift schedules, as stipulated by the Telkom policy, guards against inflexibility issues in changes of the shift schedules, but that doesn't limit the workers from taking inadvertent options.

The following section provides a discussion on the findings associated with the use of the working element at Telkom: Overtime.

9.2.8. The use of the working element at Telkom: Overtime

Findings from Stage 1 indicated that the number of employees who worked overtime over the nine months' period, as illustrated in chapter 6 (See figure 6.9), was regulated by the policy on overtime, but due to the decreasing workforce at Telkom, some employees had to put in more voluntary overtime to achieve organisational goals. However, the findings indicated that Telkom was strict about adhering to employment stipulations, so the employees who worked more extreme hours were not a majority. This was consistent with findings by Valenduc et al. (2004). They asserted that people working in ICT often had to cope with heavy workloads and long hours, and it was common for professionals to work overtime voluntarily. This was particularly true for those in technical (e.g., programming) jobs and senior management roles. It was a pattern that had been found across the world. However, only in some cases, informants worked long hours (50-60 hours) regularly (notably in the United Kingdom).

The findings in Stage 1 were also consistent with overtime regulations in South Africa are set out in the Basic Conditions of Employment Act 75 (1997), which ensures fair and equal conditions for all employees. Under the Basic Conditions of Employment Act 75 (1997), employees may work a maximum of 45 hours a week (excluding lunch hours) at a regular pay rate: that breaks down to 9 hours per day, for a 5-day work week, and 8 hours a day, for a workweek of more than five days.

The following section provides a discussion on the findings associated with the use of the working element at Telkom: Call-out (also referred to as *T-421*).

9.2.9. The use of the working element at Telkom: Call-out (also referred to as *T-421*) system

This study's document analysis revealed that the Call-out (also referred to as *T-421*) system was used to summon employees to work. Essential workers were the ones who mostly utilised this option, as indicated in chapter 6 (See Figure 6.10). The findings over the nine months' period amounted to instances of being called out of 11.06 of Call-out (also referred to as *T-421*) usage with an average of 1.23 for every respondent, confirming that the respondents were more inclined to utilise the Call-out (also referred to as *T-421*) system. The high use of the Call-out (also referred to as *T-421*) system could be attributed to Telkom's restructuring affecting all operations, and as many jobs changed accordingly. This was supported by Mybroadband (2018) which stated that, as Telkom restructured, the result was there were fewer people to cover more work, which explained the increased usage of the Call-out system. (also referred to as *T-421*).

The next section looks at work on non-standard days/times at Telkom. This section focused on the following aspects:

- Work on non-standard days/times at Telkom: Sundays
- Work on non-standard days/times at Telkom: Public Holidays
- Work on non-standard days/times at Telkom: Overtime for Management and Specialist Levels.

The following section provides a discussion on the findings associated with work on non-standard days/times at Telkom: Sundays.

9.2.10. Work on non-standard days/times at Telkom: Sundays

Findings on working Sundays were measured over three-month intervals over a nine months' period. The first interval January-March had a mean ($m=6.46$) and standard deviation ($sd.=$

1.52) indicating a tendency towards work on Sundays. The second interval April-June period, which revealed a mean ($m=6.93$) and standard deviation ($sd=1.64$). The means and standard deviation indicated a tendency towards work on Sundays. The third interval, July-September period, showed a mean ($m=9.00$) and standard deviation ($sd.=1.92$). The means and standard deviation showed an inclination towards work on Sundays, as well as an unspecified number of respondents. This was consistent with a comparative study by Xobni (2010), who concurred that 72% of Americans, and 68% of British citizens, checked their emails on non-working days (such as during vacations or weekends). A study by Walila (2012) also found that new work arrangements and distorted work arrangements are in line with the current study's findings, indicating an inclination to work on Sundays.

The following section provides a discussion on the findings associated with work on non-standard days/times at Telkom: Public Holidays.

9.2.11. Work on non-standard days/times at Telkom: Public Holidays

Findings from Stage 1 indicated that a majority of the employees, as shown in chapter 6 (See Figure 6.12) did not voluntarily work on public holidays for the nine-months period of 2018. This was also attributed to the fewer number of holidays for that nine-months period of 2018. The finding was in line with the Basic Conditions of Employment Act 75 (1997), Section 18 on Public holidays, which stipulates that an employer may not require an employee to work on a public holiday, except by a mutual agreement. In line with international standards, the International Labour Organisation (ILO) provided for at least three working weeks' annual leave, as per the ILO Holidays with Pay Convention (Revised), 1970 (No. 132).

Furthermore, the voluntary nature of work on a public holiday, as shown in this study's findings in Stage 1, were in line with the Basic Conditions of Employment Act 75 (1997), Section 18 which states that an employee only works on a public holiday if he/she agrees to it. If the public holiday happens to be the employee's regular shift, then that the employee is entitled to be paid a minimum of double their regular wage rate for the day.

The following section provides a discussion on the findings associated with the use of the work on non-standard days/times aspect of overtime, for Management and Specialist Levels at Telkom.

9.2.12. Work on non-standard days/times at Telkom: Overtime for Management and Specialist Levels

Findings for the Overtime for Management and Specialist Levels were measured over three-month intervals over the nine months' period, and seven (7) employees qualified for this work on non-standard days/times. All the staff members utilised this work on non-standard days/times for the first interval of January-March. The second interval, April – June, revealed that five (5) respondents (10.0%) utilised the system, and two respondents (4.0%) did not use it. The missing number of participants 43 was because there were only seven staff members applicable at this level. The third interval, July – September, revealed that six (6) respondents (12.0%) utilised the system, and one (1) respondent (2.0%) did not use it. The missing number 43 was because there were only seven staff members applicable at this level.

The usage of available work-life initiatives in this current study is in line with studies by Moosa (2017), who advanced the idea that organisations go further to have women included in their work-life initiatives to succeed in their careers. According to Moosa (2017), to address women's advancement within an organisation, an organisation should implement family-friendly initiatives to help women become overburdened with work that could spill over into their personal lives.

This concludes the discussion on the findings according to the Telkom policy and its respective themes. The next section discusses the frequency of usage of the virtual assistance programme, *Telkom Touch*, and its various themes.

This section looks at the following aspects:

- Utilisation of leave options at Telkom: Educational Leave
- Utilisation of leave options at Telkom: Exceptional Leave
- Utilisation of leave options at Telkom: Family Responsibility Leave
- Utilisation of leave options at Telkom: Bereavement Leave
- Utilisation of leave options at Telkom: Medical, Dental, and Related Leave.

In line with international standards, it was essential to note that leave policies were also covered by the International Labour Organisation (ILO), and these included:

- Annual leave
- Sick leave that can be used for family emergencies
- Emergency/compassionate leave

- Parental leave days

The first aspect is the utilisation of leave options at Telkom: Educational Leave.

9.2.13. Utilisation of leave options at Telkom: Educational Leave

This study's document analysis revealed that the *Telkom Touch* programme allowed employees with children to take care of their children's welfare. The policy encouraged employees to make time for their children, based on stipulated durations, that employees could take up to 10 consecutive days for Educational Leave. Consequently, according to Armstrong et.al (2007) & Valk and Srinivasan (2011) ICT, women professionals need to put in extra training and educational hours to keep up with these changes. The findings of this study indicated that women did not utilise the educational option frequently to upgrade their skills. This is in contradiction with a study by Ryklief (2018:7) who highlights that "ICT's are not just revolutionising the world but revolutionising themselves with advancements in one area having a knock-on effect in another" and if one is to be relevant, there is a need to upscale their skills through the utilisation of educational options like educational funds and leave options subject to arrangements with their employers. In contrast to the current study findings, studies by Malinga, (2019) & Ojokoh (2010) highlighted the importance of encouraging women to pursue ICT careers by the utilisation of educational options an organisation they work for offers. This could according to Malinga, (2019) & Ojokoh (2010) be in the form of sabbaticals. Another study by Fajardo and Erasmus (2017), which contrasts with the current findings, posits that women are as ambitious as men and would advance given the right opportunities. Sorgner et al.'s (2017) findings also support the current study findings by indicating that that point to non-engagement in addressing gender gaps and unfavourable policies leads to employees not accessing the available opportunities.

Employees' eligibility for Educational Leave entailed that an employee must have done up to one year's continuous service with Telkom and give the proper notice. This was in line with the Basic Conditions of Employment Act 75 (1997) provisions, which entitles an employee to 10 consecutive days' Educational Leave. In addition, the application of the Skills Development Act 97 of 1998, aimed at expanding the knowledge and competencies of the labour force to improve productivity and employment, is one way employees can upgrade their skills. A study in line with the current findings in terms of awareness is that by Fernandez (2013), who emphasised the need to implement better the Employment Equity Act No. 55 of 1998. This current study's findings highlighted the availability of work opportunities available for women, which is in line with SA News's report (2016). Studies by Bosch (2011) and Van den Berg and

Van Zyl (2008) support the notion of access to educational opportunities for all, and this is consistent with the study's findings that advocate for the use of educational leave by the use of the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015.

Findings of Stage 1 and Stage 3 indicated 24 respondents had children under 18 years living at home, and 26 respondents had no children under 18 living at home. Findings of Stage 3 under dependent adults /children-related tasks revealed that; 24 respondents always took care of dependent adults/children, which presented a challenge in that the women had to play the role of caregiver by utilising the Educational Leave option and putting in partial work. Being a caregiver meant that females with children under the age of 18 might not use the option of Educational Leave and subsequently miss out on work-related opportunities.

This was in line with a study by Bencheva et al. (2018), who mentioned that caring responsibilities, and other family or personal reasons, were also among the most often-cited reasons why women worked part-time in ICT. Among women working part-time in ICT, two thirds (64 % in total) chose that option because; they had to look after children or incapacitated adults (47 %), or had other family responsibilities, or for personal reasons (17 %).

The next section discusses the utilisation of leave options at Telkom: Exceptional Leave.

9.2.14. Utilisation of leave options at Telkom: Exceptional Leave

This study's document analysis revealed that employees were inclined to take unpaid or, in some cases, paid leave, often at short notice, to deal with unexpected events or sudden emergencies at home. This paid or unpaid leave could involve a dependent, thus necessitate making longer-term arrangements. However, according to the Basic Conditions of Employment Act 75 (1997), there was no provision which entitled an employee to take unpaid leave. Unpaid leave was referred to in the Act only as a provision of what the employer was entitled to do when an employee's sick leave, or annual leave had been exhausted - the employer could then allow (or request) the employee to take unpaid leave. However, no part of the provision in the Act allowed an employee to demand permission to take unpaid leave.

Stage 1 findings indicated that over the nine months' period, measured over three intervals, two intervals revealed disinclination towards taking Exceptional Leave, with the January-March period ($m=4.04$), ($sd.= 1.80$) and July-September period ($m=6.42$), ($sd.= 2.46$). The April-June period ($m=9.37$), ($sd.= 2.02$) was the only interval that showed an inclination towards taking Exceptional Leave.

The next section discusses the utilisation of leave options at Telkom: Family Responsibility Leave.

9.2.15. Utilisation of leave options at Telkom: Family Responsibility Leave

This study's document analysis revealed that, the Telkom programme allowed for Family Responsibility Leave, which granted up to four days a week, if employees have been employed for longer than four months. This was in accordance with the Basic Conditions of Employment Act 75 (1997) Section 27 of the Basic Conditions of Employment Act 75 (1997) which envisaged the need for Family Responsibility Leave and afforded the benefit to all employees who had been in employment with the same employer for longer than four months, and who worked for at least four days a week, and were entitled to three days paid leave per annual leave cycle, for Family Responsibility Leave. Family Responsibility Leave could be accessed when an employee gave birth, the employee's child was sick, in the event of the death of the employee's spouse or life partner, or the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling. Notably, section 7(d) of the BCEA also stipulated that every employer regulate each employee's working time with due regard to family responsibilities.

In accordance with international standards, the International Labour Organisation (ILO) also provided for the Workers through Family Responsibilities Convention, 1981 (No. 156), which applied to male and female workers with responsibilities concerning their dependent children, where such responsibilities restricted their possibilities of preparing for, entering, participating in or advancing in economic activity.

Findings in Stage 1 revealed that Family Responsibility Leave was measured over a three-month interval over the nine months' period. All the intervals indicated an inclination to take Family Responsibility Leave, January-March ($m=8.08$), ($sd.= 1.60$), April-June period ($m=7.93$), ($sd.= 1.94$) showed an inclination towards use of Family Responsibility Leave, though there was almost equal disinclination, July-September ($m=8.192$) and ($sd.=2.32$). This study's document analysis and findings from Stage 1 indicated that Family Responsibility Leave could be taken in addition to any other leave entitlement. Any unused portion usually ended forfeited at the end of each year, as it was not accumulative. Family Responsibility Leave applied when the employee's child was born, the employee's child was sick, or in the event of the death of the employee's spouse or life partner, or the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

Linking this to Stage 2 findings, it could be discerned that the positive attitude toward family responsibility may have stemmed from the fact that Family Responsibility Leave expired at the end of every annual cycle. So, the tendency was employees used it based on the knowledge that Family Responsibility Leave did not accumulate. It could also mean that the women did have to attend to real family responsibilities each time. This was consistent with Mahaska's (2016) findings, who asserted that women were still expected to carry all their family responsibilities despite their employment status.

The next section discusses the utilisation of leave options at Telkom: Bereavement Leave.

9.2.16. Utilisation of leave options at Telkom: Bereavement Leave

This study's document analysis revealed that, in the case of death of a close relative, an employee could be granted Bereavement Leave for four consecutive working days, including non-working days, beginning on the day of death, with no loss of pay. The bereavement policy, unlike Family Responsibility Leave, specified what relationships were eligible. This was in line with the Basic Conditions of Employment Act 75 (1997) which provides for employees on the occasion of a person's death, making them qualify for Family Responsibility Leave, if the death is a close relative. The death of any other relatively distant relatives was not covered by Family responsibility leave, or Bereavement Leave. Those occasions are treated as annual leave.

Findings in Stage 1 for the Bereavement Leave were measured over three-month intervals over the nine months' period. All the three intervals showed disinclination towards Bereavement Leave: January-March ($m=7.35$), ($sd.=2.48$), April-June period ($m=8.35$), ($sd.=2.48$) and July-September period ($m=7.23$), ($sd.=2.26$). The findings indicated that for the nine months' period, most employees did not utilise Bereavement Leave. This could be attributed to factors such as, not being affected much by a death, or simply not being eligible for the leave, because this would be a distant relative's death.

The next section discusses the utilisation of leave options at Telkom: Educational Leave.

9.2.17. Utilisation of leave options at Telkom: Educational Leave

This study's document analysis revealed that, Telkom had the Educational Leave initiative in place. The initiative offered paid time off for employees, to prepare for and write their final examinations for approved study courses. A finding that is consistent with the study's findings in terms of awareness is that by Cox and Harquail (1991) found that human capital explanations suggest that gender differences in career success can be remedied by improving the

qualifications of women to match levels of the men with whom they compete for promotions and pay increases.

This current study's findings were however in contrast with the Basic Conditions of Employment Act 75 (1997), which was is silent on the matter of study leave, and therefore in the purpose of Labour Law, study leave does not exist. This remains a matter for arrangement entirely between the employer and the employee, and if the employer stipulated that study leave be deducted from the employee's annual leave entitlement, or be taken as unpaid leave, then that decision applied. Findings of leave options are in contrast with those by Deery and Jago (2009) who highlight that career advancement opportunities, informal feedback, child-care facilities, generous leave policies, sabbatical, additional time off to pursue hobbies are what organisations should strive to encourage their employees to pursue.

Stage 1 findings for the Educational Leave were measured over three-month intervals over the nine months' period. Two intervals indicated disinclinations towards Educational Leave. January-March ($m=6.27$), ($sd.= 1.88$) and April-June period, ($m=5.79$), ($sd.= 2.54$). The period July-September ($m=8.14$), ($sd.= 1.90$) showed an inclination towards Educational Leave. This period was the only one that marked a positive tendency towards Educational Leave.

The next section discusses the utilisation of leave options at Telkom: Medical, Dental, and Related Leave.

9.2.18. Utilisation of leave options at Telkom: Medical, Dental, and Related Leave

This study's document analysis revealed that, Telkom allowed employees to take time off to attend to their medical needs, and so Medical, Dental, and Related Leave was in place. Telkom employees were entitled to take time off to deal with the death of a dependent, deal with a gravely ill dependent, in a case where a dependent was having a new-born baby, make longer-term arrangements. Employees could also take time off to deal with an unexpected disruption or breakdown of care arrangements for a dependent.

This study's document analysis regarding medical in terms of Medical, Dental, and Related Leave was in line with the Basic Conditions of Employment Act 75 (1997). It stipulated that under the sick leave option a sick leave cycle was 36 months' employment, with the same employer, immediately following the date of commencement of employment, or the completion of the prior sick leave cycle. For every 26 days' work, and during the first six months of employment, the employee was entitled to 1-day sick leave. On the first working day of the seventh month, 30 days' balance would become available to the employee, less any days taken sick during the first six months of employment.

Stage 1 findings indicated that two intervals showed an inclination towards the utilisation of leave options at Telkom: Medical, Dental, and Related Leave: January-March ($m=7.66$), ($sd.=2.16$), July-September ($m=8.86$), ($sd.=1.70$) and April-June ($m=7.46$), ($sd.=1.88$) indicating disinclination towards Medical, Dental, and Related Leave. The under-utilisation of this option was in contrast to Octopus HR (2018) findings, that women tended to be the primary caregivers for children, or elderly relatives, and therefore were more likely to take sick leave days to deal with such emergencies. The study established that women took 63% more sick leave per year than their male counterparts.

The next section looks at utilisation of work practices at Telkom. The section focuses on the following aspects:

- Utilisation of Work practices at Telkom: Flexible working (parents and carers of adults in need of care)
- Utilisation of Work practices at Telkom: Flexitime
- Utilisation of Work practices at Telkom: Telework.

The next section looks at utilisation of Work practices at Telkom: Flexible working (carers of parents and adults in need of care).

9.2.19. The utilisation of Work practices at Telkom: Flexible working (carers of parents and adults in need of care)

This study's document analysis indicated that Telkom was committed to helping working parents, following the policy statement on flexible working. Parents of children under age 17 or disabled children under 18 years had the right to apply for flexible working. This was in accordance with the provisions of the Basic Conditions of Employment Act 75 (1997). Parental leave relates to the birth of a child.

The above finding in terms of the document analysis is also in line with Padma and Reddy (2013), who asserted that employees with adult children could easily find a balance, compared to those with younger age children. Findings in Stage 1 indicated that Employees with responsibilities to care for adults in need of care, also have the right to flexible working, thus could still manage their roles at home, as they navigated through their work. This was in line with Van Aarde and Mostert (2008), who observed that despite the increase in women entering the workforce, they still have to adapt their traditional roles to the new status quo.

Findings of Stage 3 on dependent adults/children-related tasks, revealed that the 24 respondents always took care of dependent adults/children, which presented a challenge for these women; in order to effectively manage their roles as caregivers, they needed to utilise this leave option

and working part time. The findings were in line with the study by Muller-Heyndyk (2019), who asserted that women were nearly three times more likely to take time off work to look after children. A study of 3,001 working adults showed that 74% of women were the primary caregivers for children, taking short or long periods off work to look after the family, compared with 26% of men. Singley and Hynes (2005) also affirmed that flexible working was most likely to be used by women for caregiving purposes and confirmed the current study finding by stating that women are the primary caretakers of children.

The next section looks at the utilisation of Work practices at Telkom: Flexitime.

9.2.20. Utilisation of Work practices at Telkom: Flexitime

This study's document analysis revealed that flexitime was a working practice at Telkom SA, and most commonly understood as a way of adjusting start and end times of a workday, to accommodate employees who best met organisational objectives. Findings for the Flexitime were measured through three-month intervals over the nine months' period. Two intervals indicated an inclination towards the use of flexitime, April-June ($m=8.33$), ($sd.= 2.20$) and July-September ($m=8.73$), ($sd.= 2.18$). The period January-March had the following mean and standard deviation, ($m=4.31$), ($sd.= 1.76$) showing disinclination towards flexitime. The use and awareness of flexitime at Telkom was in line with the Employment Equity Act, 55 of (1998), which stated that although flexitime was not a work arrangement reserved only for women but for all employees. It is noteworthy that section 15 of the EEA also stipulated that designated employers must adopt affirmative action measures to ensure equitable representation of designated groups, (which included women) and reasonable accommodation of such groups. The current study findings contradict Jacobs (2017). Jacobs (2017) explored flexitime options as not affecting job commitment regardless of whether the employees had access or no access to them but as clearly seen from the study, employees having met organisational goals had access to this option.

The next section looks at the utilisation of Work practices at Telkom: Telework.

9.2.21. Utilisation of Work practices at Telkom: Telework

Telework was a working practice at Telkom SA SOC Ltd and it entailed Internet, email, and telephone being used while working from home. This study's document analysis revealed that telework was a flexibility-based initiative which allowed employees to have flexibility in their workspace, and perhaps time. That way employees could better manage their activities and continue to work full-time hours. Findings for the Telework were measured over three-month

intervals over a nine months' period. All intervals indicated an inclination towards telework. The interval January-March ($m=8.81$), ($sd.= 2.00$), April-June's had a mean ($m=8.56$) and standard deviation ($sd.= 1.96$), and July-September had ($m=7.35$), ($sd.= 1.52$). The results revealed the frequency with which employees utilised telework, it was high. The implication was that women probably preferred to work closer to home, or closer to their families. This was in line with the study by Tremblay (2002), who asserted that it may be surprising to note that for some being close to the family was not the primary motivation, but that flexible schedules, and ways to avoid traveling to work, had a positive influence on work-life balancing.

The next section presented the utilisation of work-based health and wellness services at Telkom. It focused on the following aspects:

- Utilisation of work-based health and wellness services at Telkom: Employee Assistance Programme
- Utilisation of work-based health and wellness services at Telkom: Wellness Programme

The next section focuses on the utilisation of work-based health and wellness services at Telkom: Employee Assistance Programme.

9.2.22. Utilisation of work-based health and wellness services at Telkom: Employee Assistance Programme

This study's document analysis ascertained that Telkom had an Employee Assistance Programme under the *Telkom Touch*.

Findings in Stage 1 regarding the Telkom Employee Assistance Programme, were measured over three months' intervals for a nine months' period. All the intervals indicated an inclination towards the use of the Employee Assistance Programme; January-March ($m=8.10$) and ($sd.= 1.58$), April-June ($m=4.52$) and ($sd.= 1.14$) and July-September ($m=8.14$) and ($sd.= 1.52$). The use of the Employee Assistance Programme by the employees signified that they were aware of it. The application of the Basic Conditions of Employment Act 75 (1997) in the South African context, which the government ensures organisations adhere to, explained why employees were aware of the Telkom Employee Assistance Programmes. This finding was in line with the Basic Conditions of Employment Act 75 (1997) application, which implies that an employer must adhere to the prescribed working conditions, to enable the employee to attain his/her full potential to be productive. Another study that supports the inclination of using the Telkom Employee Assistance Programme is supported by Den Dulk et al. (2013). The authors emphasised the notion that organisations adopt WLB initiatives based on their financial capabilities. An additional study by Zheng et al. (2015) which supports the study's findings

advocated for many ways of ways in which organisations could meet work-life balance needs of their employees and health and wellness programmes are amongst them.

However, findings by Sweet et al. (2014) contradict the notion of the usage of work-life balance initiatives attributing this to organisations' reluctance to implement them due to the world economic recession.

The next section looks at the utilisation of work-based health and wellness services at Telkom: Wellness Programme.

9.2.23. Utilisation of work-based health and wellness services at Telkom: Wellness Programme

This study's document analysis revealed that Telkom SA SOC Ltd had a wellness programme for employees, consisting of several different initiatives targeting employee health and well-being, which worked with the *Telkom Touch* system, operating as a reference point for employees.

Findings in Stage 1 regarding the Telkom Employee Assistance Programme, were measured over three months' intervals for a nine months' period. All intervals revealed an inclination towards the use of the Telkom Employee Assistance Programme, with January-March ($m=8.10$), ($sd.=1.58$), April-June, ($m=4.52$), ($sd.=1.14$) and the July-September period ($m=8.14$), ($sd.=1.52$). The findings in Stage 1 regarding the Telkom Employee Assistance Programme in line with employers' requirement to ensure that the Basic Conditions of Employment Act 75 (1997) in the South African context, was adhered to, by establishing wellness programmes, and ensuring that employees were aware of them at Telkom.

This concludes the discussion on Theme 1: The utilisation of Telkom's work-life balance organisational policies and practices by female ICT professionals.

The next section looks at Theme 2: Female ICT professionals' interpretations, challenges, and benefits of work-life.

9.3. Theme 2: Female ICT professionals' interpretations, challenges and benefits of work-life

This theme focused on female ICT professionals' interpretations, challenges and benefits of work-life.

The next section explores the interpretations, challenges and benefits of work-life at Telkom. This section focused on the following aspects:

- Career females' interpretations, challenges, benefits, views of work life
- Career females' interpretations, challenges and benefits of retention in the ICT field
- Career females' interpretations, challenges and opportunities of workplace conduct.

The following section looks at the aspect of career females' interpretations, challenges, benefits, views of work life.

9.3.1. Career females' interpretations, challenges, benefits and views of work-life

Findings in Stage 3 of the study had participants provide interpretations of work life, in terms of how they viewed their work, and female ICT professionals provided an insight that as they got paid in monetary incentives, it gave them a sense of meaning and purpose. This was in line with a study by Cassar and Meier (2018), a job can offer workers a sense of purpose and demarcate the benefits and drawbacks of various careers.

Brue's (2019) research also reported the interpretation of challenging environments by participants and this is in line with the current study's findings where participants interpreted their ICT work environment by attaching meanings to what they experienced. Participants in the current study provided varied interpretations of work-life. The results of the present study support the findings of the surveys by Braun and Peus (2018), Kumarasamy et al. (2015) & Bloom (2015) who maintained that it could be concluded that work-life balance does not mean that the same amount of time is given to life at work and life outside work. The current study findings revealed that employees see the ICT work environment as dynamic and all see various aspects.

Further findings in Stage 3 sought interpretations of boundaries of work, and limitations. This meant the definitions of what the female ICT participants gave, in terms of their perceptions of labour, their careers, and the awareness of their relationships with superiors, colleagues, and clients. The findings were in line with Haar et al. (2014) who found that high levels of work-life balance are more positively associated with job and life satisfaction for individuals in individualistic cultures, compared with individuals in collectivistic cultures. Additionally, according to Song and Gao (2018), the permeability of work and family life increases and worsens the work-life. The study's findings in terms of work-life balance are supported by Cervia and Biancheri (2017), Herman (2015) & Herman and Lewis (2012). They highlight the

challenges of achieving career growth while having other responsibilities of being a homemaker and navigating cultural norms, views, and perceptions of society.

Findings revealed the following challenges and benefits, with reference to the following aspects:

- Gender stereotypes,
- Flexibility and time management,
- Dependent adults/children-related tasks,
- Work/home interference,
- Sense of accomplishment,
- Skills acquisition.

Gender stereotypes: Gender stereotype findings in Stage 2, showed that most females felt they were treated fairly, and were even able to manage others, lessening the challenges that came with working in a male-dominated industry. This supported the Employment Equity Act 55 of 1998: Code of Good Practice, which addressed a specific aspect of workplace discrimination, and the undervaluing of work, based on listed, or any other arbitrary grounds.

These results could be attributed to the fact that a firm social stereotype concerning the masculinity of specific careers emerged, and Information and Technology Communications were on the list, one important aspect which influenced some women's decision to stay away from the profession. This was further highlighted by 16 respondents, who indicated they could opt to leave an ICT job, compared to five who stated they would never. The bias towards men has a negative impact on women, they end up feeling less confident about their abilities. This is consistent with Aranda and Jerrard who emphasised the issue of inequality in male-dominated fields that force females to leave their careers.

However, the findings in Stage 2 also contradicted Lyons et al. (2009), who stated that stereotypically feminine traits, and management styles (consultative, conciliatory, partnership-oriented, and collaborative) were generally viewed as positive, but not used to describe successful managers, or view management positions. Science and engineering jobs had always been considered 'men's work' while childcare, teaching, and clerical work had been 'women's work.' Another finding by Hochschild (1989) contradicted the current results by stating that the influx of women in the world of work, especially for those wanting to experience upper-level professional positions, has not been facilitated by the necessary shift in cultural expectations regarding gender roles in marriage, family, and work. Studies by Baringoltz and

Gauna (2014) & Alutu and Audu (2009) presented a challenge: they reported that few women had access to ICT-related opportunities in education and career.

Other females felt they were stereotyped because, they were given fewer tasks than their male counterparts, and had their positions questioned in a male-dominated sector. This was in line with Feyerherm and Vick's (2005) research, who found that in a study of women felt stereotyped, undervalued, and underutilised by the male-dominant cultures, which they believed perceived them as too young, and inexperienced. This finding by Feyerherm and Vick (2005) also supported the previously mentioned existence of invisible cultural norms, which included such dynamics as, feeling the need to be available at all times, the need to attend delayed, or emergency meetings. These women did not believe there was a way to circumvent this status quo, even in companies that sincerely wanted to support and develop them.

Flexibility and time management: The majority of the women confirmed they were frequently afforded flexibility in the workplace as females, thus lessening the challenges of working in a male-dominated industry. Some individuals expressed the sentiment that they did not have the time and flexibility to do other things, such as upgrading their education, as shown in Stage 1, in terms of utilising Educational Leave. The findings were supported by Barbieri et al. (2018), who stated that another challenge was the need for continuous upscaling of skills, which was a prerequisite for a successful career in the ICT sector. This could be difficult for women who still tended to take the lion's share of household, and caregiving responsibilities, and therefore did not have time to engage in training outside of office hours. The equal sharing of home responsibilities could play a key role in giving women equal chances in building their careers. This current study's findings are in line with previous studies by Jones (2013), Li et al. (2009), Haustein et al. (2009), Hutchison (2008), Wethington (2005), Elder, 2003), Ganz et al. (2003), Settersten (2003), Wheaton and Gotlib (1997) & George (1993) which explored the perception and usage of time, trajectories, linked lives, life pathways and time's changing dynamics in a rapidly changing world, especially in the ICT sector, and how specific life paths shift an individual's direction.

Dependent adults/children-related tasks: A look at the statistics showed that 24 respondents took care of dependent adults/children; which presented a challenge with time management. As was indicated in Stage 1 of the findings, any additional working hours that women utilised, the over-time and shift hours, at the organisation, presented a challenge as supported by Santhana and Gopinath (2013), as they encroached into the time required to attend to the children and the other dependents. The Gender Equality Act 39 of 1996 and Promotion of

Equality and Prevention of Unfair Discrimination Act 4 of 2000 also support the current study. The Act works to give effect to section 9 read with item 23(1) of Schedule 6 to the Constitution of the Republic of South Africa, 1996, to prevent and prohibit unfair discrimination and harassment, to promote equality, and eliminate unfair discrimination. Another study by Razavi (2007) supported the women who had caring responsibilities for dependent adults/children as this highlighted that women still did most of the devoted activities.

Work/home interference: The interference was with responsibilities such as; home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare, participants' responses showed that several respondents did feel that work/ career interfered with their responsibilities at home, because they spent more time at work. Some females felt that engaging in work activities did not interfere with their home domain. Instead, it enabled the females to carry out work activities without interference. The findings showed both the positive aspects, which was in line with a study by Desrochers and Sargent (2004) who highlighted that integrative work-life arrangements can help individuals balance work and life because the role shift is easy to achieve, but if the work and life domains are so highly flexible and permeable that the boundaries are blurred, work-life conflicts will occur. This current study's finding also concur with Emslie and Hunt (2009) and Gurney (2010) who asserted that family commitments were a big obstacle for women's career development.

A study by Grzywacz and Marks (2000) also concurs with the current study as it explained that although employed women could experience negative interference between work and family, the interaction between those domains could also be a positive one. Participating in multiple roles could provide the individual with more opportunities, and resources, to promote growth and better functionality in other domains of life.

The positive findings above are in conflict with findings by Nathani and Jha (2009) & Sturges (2008), who explored how one life domain impacted on another domain. This is explained by the fact that, there is a blurred boundary between a home domain and a work domain. To further support the current study findings, Shiva (2013), Leena and Sudhir (2013) & Krymis (2012) indicated that the blurred boundaries between home and work affected women's successful management of their career and home duties. This is because these women often had to leave their responsibilities, such as childcare, in others' hands. Other previous studies that support the current study's findings by Seeley (2015), Hall and Quinn (2014), Milkie et al. (2008), Bellavia and Frone (2005) & Lynn et al. (1996) emphasised how physical, temporal, and psychological forms individuals' borders making individuals move between them in life.

Sense of accomplishment: A sense of accomplishment meant that several respondents felt that this was a benefit rather than a challenge, as it helped them become better friends, and family members. This was supported by Feyerherm and Vick (2005), who asserted that for fulfillment and accomplishment, women defined relationships in terms of how they provided internal happiness or joy with family, and close friends, who provided the motivation, energy, and purpose in their lives. Another study supported the current study's finding by Opie and Henn (2013) asserted the importance of achieving self-actualisation and fulfillment as benefits associated with balancing work-life. The benefit found in the current study concerning aspects that interfered with life was positively inclined. The participants indicated yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare had no interference. A study by Michel et al. (2011) explored the multiple roles that individuals played that led to positive aspects and happiness and the effect on one life domains' activities on another, hence confirming the current study's findings.

Skills acquisition: Several respondents appreciated the benefit of skills acquisition and felt that their work/career helped them acquire skills, which helped them become better friends and family members. This was supported with findings by Baral and Bhargava (2010) who assert that, Work-Life Balance Programmes (WLBPs) are vital in creating a sense of assurance to employees that employer is supportive of their well-being and other non-work-related needs. Another study that supported the current study's findings is that by Feyerherm and Vick (2005), that relationships in the professional success of employees an inclusion of support mechanisms, such as a mentor or a collaborative, coaching boss, and working in a supportive environment of relationships and fun fueled by the energy of constant challenge assisted women in having conducive relationships.

Findings in Stage 3 revealed another challenge. The challenge which the participants experienced stemmed from many participants' who had of opportunities to upgrade their skills through furthering their studies. The findings in Stage 1 confirmed the findings in Stage 3, which revealed apathy towards this educational option over the nine-months period of 2018. This was in contrast to studies by Armstrong, Riemenschneider, Allen, and Reid (2007) & Valk and Srinivasan (2011), who stated that there was a necessity for the women ICT Professionals to adapt themselves to the rapidly changing technology, by re-skilling and training. Consequently, female ICT Professionals needed to put in the extra training and educational hours to keep up with these changes. Another finding by Lörz and Mühleck (2019) alludes to the fact that, the educational context includes previous experiences, present opportunities and future returns. Persons are likely to evaluate the alternatives of higher education and vocational

education differently, depending on whether they already have a vocational qualification. Individuals with a vocational qualification often will have decided to obtain a higher education entrance qualification for the very reason of being able to study.

The next section looks at the second aspect of career females' interpretations, challenges, and benefits of retention in the ICT field.

9.3.2. Career females' interpretations, challenges and benefits of retention in the ICT field

An explanation of the nature of responses on how females viewed work at Telkom was provided, a confirmation of the benefit the participants believed they brought to the ICT sector. This was in line with a study by Pretorius et al. (2015:364), who stated that "South African women believe they bring a different set of skills for solving problems in the IT industry." Furthermore, Pretorius et al. (2015:364) posited that the women enjoyed the challenges that the IT industry offered. Other motivating factors included flexibility to resolve issues, that arose from work-family conflict, as well as better remuneration.

Findings in Stage 2 presented the interpretations, challenges, and benefits of retention in the ICT field. There were two views; those willing to stay, and those willing to leave. There was a positive correlation found between women's desire to stay in the industry, and the flexible work practices, such as the ability to work part-time, and the ability to work from home, when necessary to have a balance in their lives. This was supported by Park and Jex (2011), who stated that flexible working allowed employees to gain a better work-life balance, reduced stress related illnesses, and the chances of employees feeling the work-life conflict. Additional studies by Fleetwood (2007), Morganson et al. (2014), Munn (2013) & Wang and Verma (2012) highlighted the purpose of these working arrangements in assisting employers in attracting and retaining highly skilled personnel by providing support to balance their professional and personal lives.

In addition, females willing to stay were confident that they would stay in an ICT job because of the labour legislations, and opportunities afforded to females in the South African context. This could be explained by the employers' application of various labour relations legislations.

For those willing to leave, the monetary aspect had no bearing, as supported by a study done by Downes and Koekemoer (2011), it is cited that 38% of the sample of 131 employees indicated that they are considering leaving their current employer to gain a better work-life balance even if this means accepting a lower salary. Another study by Ashcraft McLain and

Eger (2016) found that talented females in ICT were often over-looked at the expense of males, making females leave the ICT industry. To further bring the issue of stereotypical challenges, Catalyst (2014) & Vorster found that there was a perception that males are better at specific jobs than females, also leading to women leaving the so-called ‘male occupations.’ Another study by Louw- Harmse (2015) is also consistent with females not getting the ICT-related promotion leading to them leaving.

Further findings from Stage 2 revealed that the number of hours spent on home-related aspects, could influence the females’ view about staying in the ICT environment. The view could be informed by the fact that the more time females spent on house-related issues, the less time they had to concentrate on, for example, upgrading their ICT skills, to keep up to date with the constant changes in technology. The added responsibilities of caring for others could result in the females having less time for work, thus the issue of time constraints. This is confirmed by a study by Ministerio de Educación Cultura y Deporte (2019) which confirmed the low numbers of women in ICT due to their added responsibilities in the home front.

As Bombuwela and Chamaru (2013) affirmed, as more women entered the workforce, they often faced barriers to career advancement in organisations. Bombuwela and Chamaru (2013) in a study carried out among executive-level female employees who worked in Sri Lanka’s private sector, found results showed that women’s careers often had been conceded, due to the glass ceiling effect, and there was a correlation between women’s career advancement, and family barriers. The findings in Stage 2 further supported Hartmann (2010) who asserted that women’s unique work experiences, coupled with archaic work-life role structures, based on gender, and as Martin and Barnard (2013) rightly put it, posed unique challenges to career-orientated women in general, more specifically, to women who choose a traditionally male-dominated career. As reported by (ICASA) Report (2017, 2016), the current study findings are in line with the report given that the ICT was found to be male-dominated.

Stage 2 findings revealed other challenges; a firm social stereotype related to the masculinity of specific careers, and Information and Technology Communications was on the list, which tended to drive women away from the profession, limitations brought about by changes in the work environment, for instance, females not being allowed to carry heavy equipment. This was confirmed by Gurung’s (2018) study, who stated that the multifaceted attribute of ICT and its relationship with women is changing discourses among scholars. The study highlighted that as the world is getting smaller due to various technological innovations, it is also equally valid that this reinforces the divide of haves and have-nots with access to these technologies. The

current study's findings are also supported by the European Commission report (2013) report that asserts that society and especially the ICT industry have acknowledged the importance of having a gender-balanced organisation.

Still, for many organisations, the question stays as a thought of the mind, and small or few actions are made to change the current gender imbalance.

The Telkom Integrated Report (2018), the Global Information Technology Report (2013), and the study by Sutherland (2014) highlight the importance of the link of ICT and legislation, and this is in line with the current study findings that aid in understanding why women leave or stay in the ICT profession.

A study by Calitz et al. (2015) is consistent with the current study's finding that there was a shortage of Information and Communications Technology (ICT), especially among women. Furthermore, a report by Eurostat (2016) also confirmed the current findings by highlighting that the ICT sector is male-dominated. A study by Morgan (2012) also confirmed that, ICT professional culture was a 'chilly' one for women. Gillard and Mitev (2006:196) concluded that: "The ICT industry, renowned for its youthful, masculine techno-culture, is a hard and unfriendly environment for women to enter and succeed in. despite equity and diversity legislation." This is in line with Zhao and Lord (2016) & Gupta (2012), who found that ICT was a masculine industry. Other studies supporting the current study findings by Hari (2017), MICT SETA (2015) & Thornton (2014) found that the ICT had a male-dominated culture which presented a challenge for women trying to move up in organisational structures.

The results of Stage 2 of the study indicated that the number of women who were available for the study provided empirical evidence to support the views of Sebata (2020), World Development Report (2019), WEF (2019, 2018), Meela (2018) & Tiainen and Berki (2019), also supported the current study's findings by asserting that women in ICT were under-represented and was mostly male-dominated. Additionally, SA Stats (2017, 2016, 2015), Schofield (2017), Chisiza (2017) & Lagerberg (2015) also provided empirical evidence of the available few women in the ICT field and this is in line with the current study's results.

However, in contrast to this study's findings, a survey by Agarwal and Malhotra & Chandra (2014) found a sizeable number of females accessing ICT-related opportunities and careers.

Findings from Stage 3 revealed that the participants' views in terms of the overall findings of this study, confirmed the conclusions drawn by previous studies concerning long working

hours, and were in line with the views by Ramilo (2002) & Hafkin and Taggart (2001) that stated the environment in ICT workplaces was not safe, and had inflexible working hours for women. This was according to Abbasi (2011: 63), “because they are dominated by men and discourage women from working freely.” Research by Prescott and Bogg (2015) also identified that women left male-dominated occupations, and moved to female-dominated occupations, due to the negative impact of their psychological experiences, such as sexual discrimination, self-efficacy, and gender role ideology. This view was supported by Chu (2005, as cited in Du Plessis & Barkhuizen, 2015), who stated that a long-standing tradition of gender segregation had a negative impact on the self-confidence of women in STEM occupations, and consequently, on their performance. This also confirms the study’s findings of having few women in ICT, as reported by Women in Global Science & Technology (WISAT) (2018). The report stated that women accounted for a minority of the world’s researchers; in 2018, only 28.4% of the total persons employed in Research and Development were women, data confirming the gender disparity in science. The study findings are consistent with Yansen and Zukerfeld (2014), who asserts that segregation of women in the labour market is not at all a novelty. It comprises the segregation in some productive regions and income disparity and differential opportunities in accessing hierarchical positions, among other issues. The study’s findings are also consistent with Trautwein (2014), who highlighted the few women accessing ICT jobs and opportunities due to entrenched views and perceptions.

In Stage 3, findings related to the career females’ interpretations and challenges for those willing to stay, participants acknowledged that they were guided by the support and encouragement received from their mentors/sponsors/supervisors, thus informed their decisions to want to continue in the ICT sector. This finding is which is similar to those found by Powell and Chang (2016) & Doubell and Struwig (2014) who stated that, a lack of female role models and mentors in academic and professional careers, was another challenge facing women in ICT. This is also consistent with findings by Deery and Jago (2009) who assert that supervisory and peer support was considered to be a relevant factor that helped with work-life balance. Another finding by Masika and Bailur (2015) that supports women’s stay in ICT is that it has been realised that women’s involvement in using and designing new technologies can empower them socially and economically.

A study by Blomstrand and Sang (2016) also supports women’s stay in ICT because knowledge about gender equality and its positive effects has spread to organisations and individuals, and many companies have today put gender diversity work on the agenda. Many companies have also set up gender diversity goals for the organisation, intending to reach a higher

representation of women. An early report by UNESCO (2014) confirmed the current study's findings by confirming gender-based studies' interest. Additionally, the current study findings supported previous studies by Zikode (2020), Omair (2019), Gillwald (2018), Matos (2017), Martinez et al. (2016), Ferreira (2015), Tlaiss and Dirani (2015), Gomes, and Sorj (2014), Tlaiss (2013, 2014) regarding knowledge on gender and that they are still gaining ground. The current study's findings contradict a study by Al-Asfour et al. (2017) reveal a limited interest in gender-based studies.

The women willing to leave the ICT sector expressed concern over the issue of various roles females have to perform in daily life, and ICT being too fast paced, which resulted in some individuals having problems with managing their work and personal lives. Findings in Stage 3 were in line with findings from Stage 1, in terms of awareness and knowledge of policies and programmes, which allowed for flexible working initiatives. The findings of this current study are supported by Chou et al. (2012), Qu and Zao (2012) & Styhrea (2011). They advocated the aspect of one domain causing problems for another leading to an imbalance in work-life balance in satisfaction in home or work life. Other studies supporting the current research by Bernardi et al. (2018), Rindfuss et al. (1987) & Bengston and Allen (1993) assert that aspect of life paths and the idea of 'life course cube,' which graphically defines and illustrates time-domain-level interdependencies and their multiple interactions that are central to understanding life courses. This helps explain the different life paths, especially for working women who may choose to leave a profession such as ICT.

The knowledge and use of such initiatives entailed that ICT professionals balance their work and home life. The aspects of shift, reduced workweek, or overtime, from Stage 1 findings, although indicating to lower work hours of 5 to 6, additional hours meant spending less time at the home front performing home-related tasks. These results were supported by previous studies done by Padmanabhan and Kumar (2016), who asserted that working hours also affected the work-life balance of an employee. Long working hours meant spending more time at the office, with a heavier workload, which affected the employee's personal life. Because of long working hours, an employee would have less time available to spend with family or friends, which could affect their personal life in many ways. This was in line with findings by Du Plessis and Barkhuizen (2015) which stated that a long-standing tradition of gender segregation of women in STEM occupations, negatively impacted their self-confidence, and consequently their performance.

Pretorius et al. (2015) also stated that in South Africa women perceived ICT jobs to be associated with long working hours. Consequently, they left those jobs, because the perceived

expectations were potentially unfavorable to their families' setup, as the ICT industry was associated with long working hours; employees expected to work overtime and be on standby anytime. This discouraged female from using long working hours for promotions and career advancement.

A finding from Stage 3 affirmed that females spent more time on care-giving duties, hence had less time to do other things. This was confirmed by the Department of Women, Youth, and People with Disabilities (2019) which found that one-third of the female employees had considered quitting their jobs, because of difficulties in balancing childcare with work. At the same time, one quarter had encountered pressure from their husbands, or other family members, to quit work in order to look after their children.

Findings in Stage 3 also outlined gender stereotypes, why some participants would not stay in the ICT field. Participants stated that the role of caregiver to the elderly and children was a challenge. This was confirmed by Castano and Webster (2011), who stated that life course events such as; growing responsibility for the care of elderly relatives, in combination with continuing responsibility for young children, created difficulties for women in senior ICT roles. In the absence of shared caregiving roles in the home and dependable, affordable care provided within society, many women often opted to leave their organisations in mid-career and move into areas of work more personally and professionally sustainable. Another study by the Union for the Mediterranean (2015) confirmed the current study's finding and reported on the aspect of women leaving the ICT sector due to its unfavourable environment that was not suitable for women.

In Stage 3, with regards to care-giving responsibilities impacting on womens' stay in the ICT sector, further findings were in line with a study by Mathur-Helm (2006) which indicated that family obligations continued to be the most prevalent barrier for women's progression in their careers. This correlated with this study's results, some of the interviewees acknowledged that they were unable to spend much time with their families as they progressed to higher levels or got promotions. The fear that women experienced, as described by Sandberg (2013), which made them choose not to take a stand, or stay in the background, was confirmed in this study, as most women tended to stand back when a man was taking the lead. Ward and Eddy (2013) supported Sandberg's research, added that, women tend to shy away from the demands of a professional career, for fear of their work conflicting with their roles as mothers (Ward & Eddy, 2013). Emory (2008) also asserted that many women tended to lose their drive to excel in their

profession, because of the many obstacles faced, such as discrimination, stereotyping, prejudice, and lack of opportunities.

The next section looks at second aspect of career females' interpretations, challenges, and opportunities of workplace conduct.

9.3.3. Career females' interpretations, challenges and opportunities of workplace conduct

Findings from Stage 3 entailed interpretations, challenges, and opportunities of workplace conduct by the female ICT professionals. The interpretation of workplace conduct had both positive and negative aspects. The existence of legal frameworks in the South African context, served as a guideline for employees' behaviour in the workplace. The use of labour legislation, such as Employment Equity Act 55 of 1998, to protect, women, and give them opportunities, in the South African context was a good way of ensuring good practices, but that did not necessarily guarantee compliance.

Positive findings from Stage 3 showed a sense of collegiality, social support, and camaraderie in the workplace, which gave the women a sense of belonging, and boost to their self-worth. Some found that their male counterparts exhibited patience, respect, and consideration, actually treated them as equals in the workplace. Participants indicated that some colleagues exhibited the attitude that working with women was normal, thus treated them as equals. This was in line with study findings generated by Kohan-Mass et al. (2018), who asserted the positive sentiments aligned with declining negative stereotypes related to women's abilities in the workplace. Studied by Russo et al. (2018) affirmed that social support in the workplace was a powerful tool for monitoring employees' personal and working life.

Negative findings from Stage 3 revealed sexism and discrimination, for example, managers deciding on what jobs to give to females and those reserved for males, comments from male counterparts questioning females' ability, making inappropriate comments or requests, or most commonly, questioning their capability to have both a career and family. This was in line with Pretorius et al. (2015), who stated that the perception that females were more suitable for nurturing, and supporting roles, as opposed to strategic and technical roles, was evidence that gender continued to be a common barrier, and challenge to women's career advancement.

Other findings from Stage 3, regarding workplace conduct, were negative, and revealed that women were stereotyped through the workplace conduct of men, who constantly questioned their ability to work in a male-dominated field. This was supported in a study by Awung and

Dorasamy (2015), which explained that studies had shown that these gender roles were carried into the workplace because; at work, there were some men who still believed that a woman is supposed to be a subordinate and not the boss. A study by Bobbitt-Zeher (2011) & Cha (2013) further explained that traditional stereotype role expectations spilled over into organisational policies, and practices, to maintain the status quo of women's marginalised work roles. Furthermore, a study by Trauth, Quesenberry, and Huang (2008: 9) stated that "...while the social status of women is improving, and the gender gap is becoming narrower...there are still significant issues with respect to improving the participation of women in the IT workforce."

An analysis of Telkom policy revealed that opportunities such as; the availability of Educational Leave entailed that participants take advantage of the opportunity to upgrade their skills regularly, thus keep abreast of the latest developments in ICT. However, as seen from the Stage 1 findings, at Telekom, there was minimal usage of Educational Leave, for the nine months' period of 2018. This was in line with findings by the Department of Women, Youth, and People with Disabilities (2019) on women in STEM courses; in 2016, the lowest number of women graduated in the STEM disciplines in South Africa. This is also consistent with a study by Huyer (2015) who confirm a drop in the number of women entering ICT-related professions after tertiary.

The next section looks at the interpretations, challenges and benefits of home life at Telkom. This section focused on the following aspects:

- Career females' interpretations, challenges and benefits of home life
- Career females' interpretations, challenges and benefits of domestic activities and time allocations to domestic work
- Career females' interpretations, challenges and benefits as a result of ICT and Internet usage.

9.3.4. Career females' interpretations, challenges and benefits of home life

Findings in Stage 3 had career females providing interpretations of home life including what constituted the blurring boundaries of home, views of home limitations, and views of home changes over time, which influenced work-life balance. Definitions of what home was, and what it represented, involved finding out how different female ICT professionals viewed their home-life, and what home-life meant to them. This is supported by findings by previous studies by Hammer et al. (2014), Bellavia and Frone (2005), Jacobs and Gerson (2004) & Bourke (2009). They explained the aspects of crossing between life domains of work and life by

women, hence drawing a definition of work-life and exploring several studies that examined the changes that were involved in multiple life roles.

Findings in Stage 3 showed that, changes in the job space had a direct influence on the home space. Masuda and Visio (2012) supported this, found that the more opportunities the work domain provided, the greater the impact on the home domain, as more likely job resources would be transferred from one domain into another.

Other findings from Stage 3 showed the same perceptions about home roles. They revealed that all the participants, irrespective of marital status, number of dependents, race, and age, had similar challenges that emerged from their caregiver and home-maker roles assumed at home. Reddy (2015) concurred and asserted that, although men's roles, in the household context, had somewhat evolved over the years, women still had the primary responsibility for childcare, elderly care, and other home activities. The current findings are confirmed by a study by Khurshid (2015) asserted that women still retained their duties as homemakers even when they had a career in ICT.

Challenges emanated from changes in the home life over-time, a symptom of the fast-paced developments in the Information and Communications Technology world. As a result, female ICT professionals experience job changes that stem from staying away from the job. This is because of family commitments and responsibilities, such as childbearing and rearing, and improvement or lack of progress of specialised skills. A finding in Stage 1 showed that the females did not utilise educational Leave for the nine months of 2018.

Caregiving was also cited as one challenge that led to females taking up leave options available at Telkom. The finding was in line with Research by Valk and Srinivasan (2011) which stated that work-life balance among women in other sectors, had recognised that in comparison to occupation roles, the salience of women's commitment to family roles, was often emphasised in Indian and African culture, as being central to their self-identity.

Findings from Stage 3 indicated that the challenge emanated from the fact that caregiving's non-work responsibilities started as soon as the female arrived home, in terms of household and other home-related chores. This was in line with studies by Yapp (2018), Dotti Sani and Treas (2016)), Bianchi, Sayer, Milkie, and Robinson (2012), Hook (2006) & Hochschild and Machung (2003). They asserted that women were expected and left to take on the bulk of caregiving responsibilities for both children and sick relatives and general household chores.

Another study in line with the findings of this study, was done by Padmanabhan and Kumar (2016), on women; specifically, Indian women. It revealed that women paid more attention to the family than their career. The guilt of not being able to take care of the children, while away from home, was a vital factor that distracted their minds and diverted attention from their office work. A study by Alghamdi (2017) confirmed women's motivation on why they joined the ICT sector due to the rapid expansion of technology and advice from family to do so.

Other findings from Stage 3 also showed that the challenge of time was regarded as significant, by female ICT professionals. The issue was the participants often found themselves inevitably spending more time on household chores and taking care of the elderly. This was confirmed by SABPP (2013), with African women, especially those living in traditional joint and extended families, they were obligated to care for the elderly, a contrast to women in Western societies.

Further findings from Stage 3 indicated that, the time allocated to domestic activities varied amongst the participants, with some utilising large amounts of time on domestic chores, such as care for the elderly. This was supported through a study by Rizavi and Sofer (2010) who asserted that women committed more than 60% of their time on housework and care, irrespective of their employment status, income or education levels.

Findings in Stage 3 also affirmed that some participants could only do half the amount of work they set out to do. The women acknowledged the importance of finding smart ways to manage their time, which was a limited resource, and hoped when applied; those ways would work. However, Ghislieri et al. (2017) found that the relationship between technology-assisted extra work and well-being outcomes is a recent scientific literature issue. Ghislieri et al. (2017) add on to state that whether the use of technology for work purpose in off-work time may have a positive or negative impact on work-family balance remains an open question, and the role of gender in this relationship is poorly understood.

Another finding from Stage 3 indicated that, for females with home responsibilities of caregiving, this created an issue with flexibility. Flexible working hours, as utilised by females in Stage 1 of this study, provided a benefit. This was in line with Al-Alawi (2016), who asserted that challenges always included women's instinctive obligations to their households.

Contradictory to the current study's findings, a study by Emsline and Hunt (2009) found that, although the work-life balance debate often focuses on the experiences of mothers of young children, results highlight that work-life imbalance is a problem for both men and women and those with any caring responsibilities.

The benefit of career females' home life, in terms of flexibility, was linked to findings in Stage 1, which revealed the use of flexibility in; work hours, reduced workweek, flexitime, telecommuting, to their advantage, to avail time for personal issues. The current study findings are confirmed in a study by Koekemoer and Mostert (2010) who assert that, aspects of technological advancement such as e-mails, laptops, i-phones, virtual meeting tools and enterprise social media tools which define the current digital workplace, have enabled job tasks to be performed in a variety of locations other than the organisational centralised offices, and have blurred the boundaries between job and home life. Studies by Derks et al (2014) & Potgieter and Barnard (2010) were also found to be consistent with the current study's results as it emphasised new methods of work utilising the existing technology. A study by Xie et al (2018) also confirms the issue of working anywhere at any time but however emphasised the issue of exhaustion brought about by this new method of working. Another study by Sullivan and Lewis (2001), which confirms the current study's findings showed that flexible working was likely to be used by women to expand their care/housework.

The next section looks at career females' interpretations, challenges, and benefits of domestic activities and time allocations to domestic work.

9.3.5. Career females' interpretations, challenges and benefits of domestic activities and time allocations to domestic work

Findings from Stage 3 revealed career females' interpretations, challenges, and benefits of domestic activities. The core of the responses showed that women spent more time on activities that involved others, like caring for elderly adults and children. This was confirmed in a study by Mani (2013), who stated that household chores were still largely the responsibility of women. Another study by Lewis, et al. (2017) confirmed the current study's findings by exploring the different roles that women perform in the home as having an impact on their time.

Study findings supporting the current study results by Omamo et al. (2015), Haslam, Patrick and Kirby (2015), Armstead (2015), Crowley and Kolenikov (2014) & Tang and Cousins (2005) indicated that working mothers endured various challenges in their strive to balance work and life and their various perceptions of the control of their lives was related to their parenting duties and work duties as well as their needs and experiences as parents. This is understood in the context that women are still required to carry out domestic duties even as career women.

The role of homemaker, and caregiver, occupied the majority of the time spent at home, on tasks ranging from cooking, cleaning, doing laundry, elderly care, and helping young children with homework. Role conflict often arose when overtime, or shift work, happened over the weekends, or when there was studying to be done at home, in a bid to improve their professional qualifications.

Women as caregivers have had interesting viewpoints in that women have been found to balance their work-life by utilising available initiatives in organisations as they are expected to fulfill roles at home and at work (see Iverson, 2011; Paludi & Denmark, 2011; Vlasnik, 2011; Paludi & Denmark, 2011, Williams, 2000 & Dikkers, Engen & Vinkenburger, 2010).

Findings from Stage 3, in terms of interpretation, showed that the role of the career females comprised various sub-roles, as evidenced by the wide range of activities that women have to do on a daily basis. The woman is expected to be a career woman, and a homemaker. This was in line with Kumari and Devi (2015), who explained that in the traditionally, women were confined to doing household work, like cooking, washing, cleaning, taking care of children. Women were considered to be solely homemakers, thus were deprived of the rights, or opportunities to go and do something outside of the home. But times have changed, hence things are now different. Apart from the homemaker role, now they also have opportunities to play different significant roles, engaging in activities outside of the home.

The problem was challenges emanating from the females doing a range of activities outside the home, thus having less time for themselves, as revealed in Stage 3 of this study. This was confirmed by Chung and Van der Lippe (2018), who asserted that the relationship between flexible working, and work-family conflict, had different outcomes for men and women, as women often remained responsible for housework, childcare, and spent more time on those chores. In addition, the finding was in line with studies conducted by Hoobler et al. (2011), they provided more evidence, that women were still attending to most of the household responsibilities.

Findings in Stage 1 of this study, in terms of benefits, established that females utilised the work-life balance policy and programme, especially as related to flexibility to take leave options, for example; the utilisation of the working features, and leave options, such as the reduced workweek, or Family Responsibility Leave, to take care of home responsibilities. This implied a blurred boundary between work and home life. This was in line with Clark (2000), who opined that for those who prioritised paid work above home, and other aspects of their

life, the flexibility in the border was more likely to result in the expansion of paid work, while for those whose priorities lay in the home spheres, flexibility could result in the expansion of domestic activities, such as housework and caregiving. One important point to note here was that it was not necessarily an individual's choice to prioritise paid work or home spheres, as external demands, and social norms usually shaped an individual's capacity to do so. The results of this study are supported by Jayawarna, et al. (2013) that emphasise that although studies concerning events of the Border Theory (Clark, 2000) are rooted in the Western context, a person is faced with multiple roles to fulfill in life.

The results in terms of benefits, contradicts the current study's findings based on a survey by Mungania (2017) that found that border crossers were more focused on the expense of other pertinent aspects such as leave benefits or social support systems in terms of friends and family.

The next section looks at career females' interpretations, challenges, and benefits of different home roles and time management.

9.3.6. Career females' interpretations, challenges and benefits as a result of ICT and Internet usage

Findings from Stage 3 showed that a majority of employees indicated that, working with ICT and the internet had made lives so much easier. All the participants stated that ICT and the internet had made life easier in that they could work anytime and anyplace. This was in line with Chesley (2014), who referred to these developments as 'work extension' and explained that such an extension occurred when ICT was incorporated into an organisation's practices, which enabled employees to carry out paid work in a non-working environment. Demerouti, Derks, Lieke, and Bakker (2014) also cited the blurring line between home and work, and that employees could work anywhere, because the Internet was everywhere, and that ICT eliminated the boundaries between work and home. In line with the current study's findings, Brue (2018) & Kotecha et al. (2014) cited challenges associated with ICT usage, which resulted from working after hours, with the aid of ICTs, that may further create behavioural-based work-life conflict in addition to time- and strain-based work-life conflict.

Xobni (2010) furthermore explained that the latter was made possible by use of fully accessible ICT devices, which were 'always connected.' ICT devices have thus begun to play a more prominent role in people's personal domains. In this sense, the new world of work was defined by Demerouti et al. (2014) as the flexibility provided in the timing of work, the place of work, and the various options provided for communication with co-workers, supervisors, and clients

through contemporary ICT. The current study's finding challenges the research of Gajendran and Harrison (2007), who assert that if telecommuting also damages vital work relationships and hampers career advancement. It also serves to challenge that this implies that work and non-work domains come at the expense of outcomes in the relationship or social domains.

In the same Stage 3 findings there was an indication that employees were available anytime, and could perform work anywhere, which was a benefit as it also meant employees had some flexibility as was also indicated in Stage 1 findings, where employees utilised work practices such as flexitime, telecommuting, or working from home. This is consistent with Chawla and Sondhi (2011), who asserted that technology enables individuals to access their work environment twenty-four hours a day, seven days a week. This finding supported the findings by Chakravorti et al. (2015) & Akamanzi et al. (2016) confirmed the current study's findings by highlighting the rapid rate at which technology is moving and allowing for work to be conducted anywhere, anytime as well as a substantial number of women entering the ICT field. The results of this study challenge previous a study done by Njoki et al. (2016) in which it was reported that a less significant number of women gaining ICT-related opportunities.

Further Stage 3 findings also revealed that some participants carried out work-related activities on weekends and other times outside of the normal work hours, meaning they worked during the weekends. This was evidenced by findings from this study, shown by the activities done after work, and during the weekends, which confirmed that employees still performed work-related activities. Jensen (2013) also found that the negative side effect of ICT, an increased expectation that employees would always be available 24/7. One of the most notable findings by Mieczakowski et.al. (2010) was that the majority of adults stated that ICT interfered with their home domain, by allowing their work to encroach on their family time. A finding according to Derks et al. (2015) that illustrates how the boundaries between family and work operate that concurs with this study's finding are that relationships have been reported between work and home boundaries and internet and ICTs and their impact on the executive level employees. Another survey in line with the current study's findings by Hahn and Dormann (2013) advocated for a boundary separation so that individuals can ascertain what needs to be done when and how.

This concludes the discussion on Theme 2: Female ICT professionals' interpretations, challenges, and benefits of work-life.

The next section looks at Theme 3: Female ICT professionals' experiences and perceptions of work-life balance.

9.4. Theme 3: Female ICT professionals' experiences and perceptions of work-life balance

The next section looks at the interpretations, challenges and benefits of work-life at Telkom. This section focuses on the following aspects:

- Career females' perceptions of work-life balance at Telkom
- Career females' perceptions of work-life balance on management of career with personal life
- Career females' perceptions of ideal balance in terms of work-life integration at Telkom
- Career females' experiences and perceptions of work-life integration at Telkom

The next section looks at career females' perceptions of work-life balance at Telkom.

9.4.1. Career females' perceptions of work-life balance at Telkom

Findings from Stage 3 showed that all participants agreed that when they thought about work-life balance, it meant the ability to control their work and life aspects, like personal interests, family, social, and leisure. The participants also indicated that once they had achieved a balance over life and work, they would be much happier and more productive. This was supported by Prerna (2012), who stated that a proper balance between work and family life, played as a key role in achieving personal and professional goals. A study by Groner (2018) supports the current findings that revealed the positive outlook of work-life balance at Telkom as it explored that if work-life balance is supported by an organisation, it becomes part of the culture of how things are done there. A study by Walter (2013) supports the management of one's career, and it explored the notion of separating work from home life to create a balance within one's life.

A more recent study by Pulevska-Ivanovska et al. (2017) were of the notion that achieving a balance between life and work, was an elusive ideal, and considered to be a complete myth. But by making deliberate choices about which opportunities to pursue, and which to decline, rather than simply reacting to emergencies, employees could and did engage meaningfully with work, family, and community.

Findings from Stage 3 revealed a perception by the female ICT professionals; that work-life balance meant an attempt to have control over ones' life but not foregoing that challenges were part of life. Findings from Stage 1 showed that the use of the workweek, with employees utilising 40 to 42 hours on average, was a way of attempting to find balance, by working the prescribed number of hours. A study by Bandias and Warne (2009) confirmed that many women affirmed that the greatest challenge in their careers was managing their work-life balance. Bandias and Warne (2009) furthermore asserted that managing the long hours

expected in some roles, with their out of work commitments, was a highly challenging issue. Over 57% of women stated they worked more than 38 hours per week, and more than 18% worked between 45 – 60 hrs a week.

According to findings from Stage 3, experiences of caring for the elderly came from participants who indicated more hours than the other themes. The finding revealed that, participants perceived caring for elderly parents as having to spend a lot of time on that aspect, as they were dealing with older people, hence more time spent on their care. It could be stressful and financially draining. This is supported previous studies by Krecker (1994) & Moen, et al. (1992) which found that family responsibilities of women is an aspect that women have to deal with during different transitions of their lives.

This was being in line with a study by Delecta (2011) who added to the issues associated with family responsibilities, by stating that the demands experienced in family life, which had a significant effect on life balance, could be identified as the demands of workload and time, role expectations in family, and support to be given to the spouse. The literature also indicated that such variances as marriage, child-raising, caring of the elderly at home, had an effect on work-life balance, since they demanded more family responsibilities. Those obligated to look after children or the elderly sometimes had to risk their careers by shortening their working hours, which could become a source of stress for them. On the other hand, those without children or any elderly to care for at home experienced less work-life imbalance.

The next section looks at career females' perceptions of work-life balance on management of career with personal life.

9.4.2. Career females' perceptions of work-life balance on management of career with personal life

Stage 1 findings of this study cited the utilisation of workweek, reduced workweek, shifts, changing shifts and overtime hours by the majority female ICT professionals, contributing to the management of career with personal life, in terms of experiences and perceptions at work. This was in line with Elnaggar (2007), who suggested that the perceptions were probably influenced by the fact that the ICT industry was already viewed as a male-dominated sector, one that required females to spend many long hours at work with young men.

Findings from Stage 3 indicated a minority of participants, who were able to find balance in the management of career and personal life, utilised the available work-life initiatives at

Telkom. Ajith and Vidya (2013) supported the current findings by exploring how IT workers balance their work-life balance as they manage the different facets of their lives. The study showed that IT workers were able to do this by supporting their organisation's work-life initiatives that helped them achieve balance. A survey by Neelam (2014) also pointed out married womens' challenges associated with balancing work-life as they entered their childbearing phase in life. This was mainly attributed to the working times in organisations they worked for (see Schultz, Hoffman, Fredman & Bainbridge, 2012; Morrissey & Schmidt, 2008; Casper, Weltman & Kwesiga, 2007; Young, 1999). In addition, in an attempt to control work and life, Bryson (2007) found that women delayed having children.

In the current study, the use of Telkom available initiatives aided females in balancing their work-life. This is in line with Greenberger et al. (1989) examined the joint and unique contributions of informal social support in the workplace and formal, family-responsive benefits and employers' policies to the job-related attitudes and personal well-being of employed parents with a young child.

The current study's findings are in line with Lee and Steele (2009), who indicated that people could make use of boundary flexibility, to move the boundaries between work and personal life, by giving them family-friendly programmes such as, flexibility or teleworking. The majority who were unable to balance their home and life domains confirmed the studies by Ireson et al (2018), Neal and Hammer (2017) & Naldini et al. (2016) who found employees who taking care of the elderly and had an increased number of dependent children to take care of experienced challenges in balancing work and life. The findings were also in line with the few females who found that they could balance their work-life, as indicated by Barber et al. (2016), who advanced that teleworking was advantageous to women, especially in demanding occupations.

The current study's finding is also in line with Mostert (2009), who found that job resources such as opportunities for development, autonomy, social support, and performance feedback have produced more positive experiences among employees, resulting in spillover to the home environment.

Challenges emanating from demographic variables, in management of work-life balance, on management of career with personal life, were identified as follows:

Age: Females of different ages have different responsibilities. Findings from Stage 2 showed that the age group 21-25years (m=3.87) exhibited the highest score for challenges in combining

work and family, followed by the age groups 26-30years and 31-35years both with (m=3.34) respectively. Studies by Pieterse and Mostert (2005) with regards to the relationship between age and work-home interaction, confirmed that some studies found no relationship between different age groups. However, in support of the findings in Stage 2, a study conducted by Grzywacz and Marks (2000) found that younger women tended to report more positive spillover from work to family, and more negative spillover from family to work, more than older women did.

The research findings from Stage 2 also concurred with Nanda's 2015 investigations, which showed that work-family conflict was lower in age groups 18-24, higher at 35-45, and lower on those above 40 years of age.

Race, marital status and care of children: Further findings from Stage 2, showed that the Black race expressed the most challenges in combining work and family. This was due to the fact that they constituted the highest population of the sample at 39 out of 50 respondents. Findings of females with children under the age of 18 had higher means, than females without children under 18, indicating that they faced challenges in combining work and family. This concurred with Reddy et al. (2010) who found that women with eldest children between 6 and 10 years old faced more challenges.

Married females also indicated a challenge in attempting to combine work and family, with partners/spouses working part-time. This contradicted finding by Tausig and Fenwick (2001), who explained that married, working couples without children, indicated greater balance, while the presence of children—married or not— significantly related to lower balance. The number of years worked for the organisation revealed that those with 6 months to 1 year, showed the greatest challenges in combining work and family.

Educational level: For the educational level, those with diploma qualifications showed the highest challenges in combining work and family. This was confirmed in a study by Tausig and Fenwick (2001) who asserted that, work-life balance was greater among those with less than a high school education, and high school degrees, while it is lower among those with a B.A. or advanced college degree.

Findings from Stage 3 indicated that female ICT professionals struggled with managing a career and personal life. This was in line with Jang and Zippay (2011) who explained that women in male-dominated occupations, struggled more with work-family conflict, than their

male counterparts, which was related to the traditional and existing roles of women in the African society. Women occupy multiple roles, such as employee, mother, caretaker, family member, church member, and wife. Some women have themselves made the choice, while others were socially enforced. Mohanty and Jena (2016) also support the current study's finding through their research that revealed the challenges women face in balancing their different life demands.

An earlier study by Gallhofer et al. (2011) also added that, despite the general use of work-life balance systems, this aspect of life remained challenging. It could not be ascertained that balancing career and family responsibilities translated into time divided equally. Against the participants' background, there were gender disparities between men and women and how women were treated in the ICT sector.

Findings from Stage 3 showed that the demanding roles of caregiver and homemaker, as well as the fast-paced ICT sector, placed time constraints on females, thus played a role in female ICT professionals' struggle with managing the two domains of life. This was confirmed in a study by James et al. (2006) who stated that, from current debates, there appeared to be a growing perception that, the IT industry was not providing an equal platform for men and women. Further findings from Stage 3 also showed how the aspect of time on activities in the domestic sphere of life, impacted the females' struggle with work-life balance. This was in line with Reddi and Vemraju (2006) who explained that this disproportionality was mainly caused by time limitations on women, because of their triple roles, (caregivers, housekeepers, breadwinners) along with cultural and societal biases and barriers, that prevented full engagement. The findings were also in line with Favero and Heath (2012) who found that women spent three times longer on domestic chores, such as cooking, cleaning, and washing.

The next section looks at career females' perceptions of ideal balance in terms of work-life integration at Telkom.

9.4.3. Career females' perceptions of ideal balance in terms of work-life integration at Telkom

Findings from Stage 3 of the study indicated the perceptions of ideal balance in terms of work-life integration at Telkom. In terms of perceptions of work-life balance, findings from Stage 3 indicated a general consensus that no form of perfect work-life balance existed. A study by Sullivan (2019) is in line with the current study's findings in showing that employees worldwide faced the challenge of balancing their work and personal lives. This was confirmed in

studies by Toffoletti et al. (2016), Wattis et al. (2013) & Murphy and Doherty (2011). They found that it was challenging to measure work-life balance in an absolute way. There were personal circumstances that influenced the perception, establishing a harmony that reflects an individual's priorities. The employees needed to draw a firm line between their personal home lives and work lives and be confident that the line was in the right place.

Other studies by Schieman and Young (2013) Voydanoff (2007) that made it hard to confirm the perceptions of work-life integration mentioned that technology makes the boundaries between work and home permeable. Additionally, in support of the current study's findings, a study by Jones et al. (2013) also asserts the importance of work-life balance and integration due to the different aspects that now compound the new world of work, such as changing demographics and technology.

Furthermore, the findings indicate that work-life integration is challenging. A study by Kelliher et al. (2019) found that work-life balance has gained a lot of interest presents a challenge as this does not necessarily imply that it is understood as outlined by the findings in the current study. Another study by Atouba and Lammers (2018) explored perceptions that existed in the ICT sector. The study revealed that the changing dynamics of the ICT field necessitated workers to strive to manage and integrate their work and lives. Several IT workers were unable to do so. The studies mentioned above confirm the current study's findings.

In addition, the findings in Stage 3 were in line with Clark's (2000:766) claim that there was no level of work integration or segmentation, to achieve work-life balance; rather, 'communication and central participation' in each domain, were the keys to negotiating work-life conflict. The responses in this study showed that an ideal balance encompassed flexitime, and this was indicated by various responses from participants, acknowledging to have supportive supervisors, the ability to pursue personal ambitions, the ability to pursue personal passions, and the organisation's support in many work-related aspects. In bringing the aspect of the Border Theory (Clark, 2002) into perspective, Clark (2002) stated that the best balance between the two domains of work and home, was created when the employee's borders were flexible, but not permeable, translating into an autonomous type of work-life balance (Nam, 2014). This statement was confirmed by Leung and Zhang's (2017) study that gained the same results. The current findings also support findings by George (2015), Ten Brummelhuis et al. (2012) & Ojha (2011), who found that support from supervisors led to employees having less work-life conflict and encouraging motivation and the opposite in terms of lack of support

indicated higher work-life conflict and stressful relationships between supervisors and employees.

Findings from Stage 3 revealed that in ICT there were females already striving for more equal rights, and sensitisation programmes to be put in place, which could help them achieve a longer-term work-life balance, hence attract more women into the ICT work environment.

Stage 1 findings showed that with a high number of employees utilising the existing work-life policies and practices, long term balance could be realised. This was in line with the study by Grobler and de Bruyn (2011), who stated that work-life balance strategies, such as flexible work practices, family-friendly practices, work-life balance arrangements, and alternative work patterns had been suggested as effective methods to improve employees' work-life balance.

9.4.4. Career females' experiences and perceptions of short-term or long-term possibility of work-life integration at Telkom

Findings from Stage 3 showed that employees' perception in terms of the short-term, or long-term possibility of work-life integration at Telkom, was that there were rigid employers who refused to make any such changes, or lacked the capability to redesign jobs, and careers into family-friendly formats. This resulted in employees' perception that the long-term possibility of work-life integration could not be realised. This was in line with Brimmer (2013) & Yavas, Karatepe, and Babakus (2011), who support the current study's findings in that, these studies explored the spillover effect of one domain into another. The effects one domain has over the other hence advocating for individuals to balance and successfully integrate the two without having negative repercussions.

Further findings in Stage 3 revealed that it was impossible to have a long-term balance between personal and professional lives. The participants with children affirmed it, and the young females yet to have children also expressed concerns about it. Findings from Stage 3 revealed that for women who wanted to take a more balanced approach toward their work and personal lives, there were inadequate chances for challenging part-time, job sharing, or flexible work. This is in line with research by Nicklin et al. (2019) and Kaya & Karatepe (2020) who have emphasised the increasing interest in work-life balance in recent times which has led to more initiatives in work-life balance being sought. Other earlier findings by Kossek et al. (2014) & Naithani (2010) with a recent study by Poulouse and Sudarsan (2017) also highlighted that there had been a constant call amongst contemporary organisations to prepare their workforce for sound well-being and improved work-life balance.

This concludes the discussion on Theme 3: Female ICT professionals' experiences and perceptions of work-life balance.

9.5. Conclusion

In conclusion, this study attempted to give insight into a previously unknown area of research in South Africa, namely, the phenomenon of experiences of female ICT professionals; by examining the utilisation of Telkom's work-life balance organisational policies and practices, by female ICT professionals, female ICT professionals' interpretations, challenges and benefits of work-life balance, and female ICT professionals' experiences and perceptions of work-life balance.

The next chapter (Chapter 10) presents the conclusions and recommendations of the study.

Chapter 10

Conclusions and Recommendations

10.1 Introduction

This chapter integrates and consolidates the findings from the data analysis discussion, into a framework formulation of the study, resulting in the work-life balance Framework. The chapter aims to conclude the study based on the research findings and informed by the comprehensive review of existing literature. The limitations of the research, and directions for future research, are included in this chapter. The implications of these findings are discussed concerning the work-life balance experiences, for both management and individuals alike. In this way, a significant and original contribution of this research to the body of knowledge and the practice, concerning work-life balance, is presented. The chapter is structured around the following headings:

- Conclusions relating themes, research aims and objectives to work-life balance framework
- Recommendations
- A work-life balance framework
- Original contribution of the study
- Limitations of the Study
- Directions for Future research
- Chapter summary.

10.2 Conclusions

This section presents the concluding remarks regarding the study's outcomes, according to the aims and objectives of this research. The next section looks at Aim 1 and Objectives 1 and 2.

10.2.1. Aim 1: To explore the awareness of existing work-life balance programmes in the telecommunications organisation

The first aim of this study was to explore the awareness of existing work-life balance programmes in the telecommunications organisation. Under the first aim, there were two objectives; to explore existing policies and programmes that address work-life balance and investigate the organisation's features and personal practices which enable employees to achieve work-life balance at Telkom. The next section looks at the research objectives starting off with the first objective.

10.2.1.1 Research objectives

1. To investigate the organisation's features and personal practice through the information from surveys available from the telecommunications company that enable employees to achieve work-life balance at the telecommunications company.

The first objective under Stage 1 of the study involved the Telkom policy and programme's awareness and usage: the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015, and the **Telkom Touch**. Stage 1 of the study found that Telkom offered several workplace provisions that guided work-life balance initiatives, as provided by the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the virtual assistance programme of **Telkom Touch** (See Telkom Touch manual, 2018).

It was found that all employees were aware of the policy and work-life balance programme currently in use, as was indicated by the findings through the utilisation of the policy and programme. It was found that the workweek inclined more towards observing the traditional hours of 40 hours per week. The utilisation of flexible hours was also utilised widely, as seen over the nine months' period, with the majority of employees utilising them. The reduced workweek showed a standard deviation that inclined towards the usage of the reduced work week. The hours of work showed an inclination towards 40 hours of work, more than the other working hours over the nine months. The observation with meal intervals was that employees usually ate as they worked, as there were no set meal times.

The investigation looked at the nine-months usage of the following working features at Telkom: Working from or closer to home, shift work, changing Shift schedules, overtime, and call-out (also referred to as *T-421*). It was found that the means and standard deviations indicated an inclination towards working from home, compared to working closer to home, all through the nine months. The shift work usage was more inclined towards shift hours of 5 and 6, as most of the employees utilised this over the nine-months period, with changing shifts leaning more towards inadvertent schedule changes, than planned changes. The overtime aspect showed hours of overtime of 2 and 3 hours, which was lower than any other overtime hours. The call-out (also referred to as *T-421*) responses over the nine months' period amounted to an average of 1.23 for every respondent, confirming that they were more inclined to utilise the option.

The investigation looked at the nine-months' usage of Telkom policy as related to working at Telkom, on non-standard days; work on Sundays, Public Holidays, and overtime for

Management and Specialist Levels. Work on Sundays was utilised by most employees over the nine months, as shown by the results which indicated that most of the employees worked on Sundays. Work on Public Holidays revealed a standard deviation with an inclination towards not working on public holidays. This was attributed to the number of public holidays over the measured nine-months period. For management and specialist overtime, the number of staff members who qualified for this category was only two Operations Specialists and five Senior Data Managers. They all utilised this option; it was revealed.

The Telkom work-life balance programme was looked at in terms of usage. There was disinclination towards Educational Leave usage over the nine months. The low usage may have stemmed from systems preference, for Affirmative Action applicants.

Family Responsibility Leave was measured over three intervals (January – March, April – June, and July- Sept). Results related to Family Responsibility Leave revealed that the first two intervals measured, inclined towards the usage of Family Responsibility Leave, with only the last interval indicating a majority of employees had disinclination towards Family Responsibility Leave. The Exceptional Leave was also measured over three intervals, with the first and third intervals indicating a means and standard deviation that was showed disinclination towards Exceptional Leave, with only the second interval indicating a higher number of users. The unspecified number was also the highest for this interval. The first two intervals of January – March and April – June revealed disinclination towards the use of Medical, Dental, and Related Leave, with the last interval July – September revealing a high usage of the option. Concerning Bereavement Leave, the nine-months period revealed disinclination in terms of the use of that option.

The work practices at Telkom, was explored in terms of usage over the nine-months period. The conclusions of work practices at Telkom are as follows: Flexible working (parents and carers of adults in need of care), flexitime and telework. Measured over three intervals, flexible working (parents and carers of adults in need of care) revealed disinclination for the first interval (January- March), and an inclination for the second and third intervals (April-June, and July – September). Flexitime revealed disinclination for the first interval (January- March), and an inclination for the second and third intervals (April-June, and July-September). For telework, all the intervals revealed an inclination towards the use of telework.

The usage of work-based health and wellness services at Telkom was measured over the nine months' period. The conclusions of Telkom Touch usage of the work-based health and

wellness services were measured over three-month intervals over the nine months. The Employee Assistance Programmes and Wellness programmes were measured over three-month intervals. Both the Employee Assistance Programmes usage and wellness programmes, indicated a high usage over the nine months.

The following section looks at Aim 2.

10.2.2. Aim 2: To investigate the work-life balance experiences of female ICT professionals in the telecommunications organisation

The second aim of this study was to investigate the work-life balance experiences of female ICT professionals, in the telecommunications organisation. Under the second aim, there were two objectives. The first one was; to evaluate the extent to which all employees were aware of policies, and programmes, that were in place, which addressed work-life balance. Second; to assess the actual challenges female ICT professionals faced in combining work and family life, at the telecommunications company.

The next section looks at the research objectives starting with research objective 2.

10.2.2.1 Research objective

2. To evaluate the extent to which all employees were aware of policies and programmes, that were in place, which addressed work-life balance at the telecommunications company.

Objective 2 was under Aim 2, it entailed looking at an evaluation of the extent to which employees were aware of work-life balance at the telecommunications company. This included the awareness of the existence of work-life balance and adherence, usage of any family-related benefits, policy establishment documentation, communication, and policy interference.

The work-life balance scale asked respondents whether they were aware of the work-life balance benefits available through Telkom, to which all 50-indicated awareness. The existence of work-life balance and adherence revealed that respondents were aware of the existence of work-life balance and adherence through their usage of available family-related benefits. The usage of available family-related benefits revealed that respondents were more inclined to use any family-related benefits.

The following section looks at the third objective under Aim 2 of the study, which was:

3. To assess the actual challenges female ICT professionals face in combining work and family life at the telecommunications company. Challenges emanated from managing work and family. Many respondents stated that there could never be an ideal work-life balance, or a long-term possibility of it, as long as gender stereotypes existed in the workplace.

Challenges and benefits were identified, like the different age groups. Challenges, such as gender stereotypes, revealed negative behaviour through the conduct of males, whom some females indicated had stereotypical behaviour of questioning their abilities. Positive behaviour in terms of conduct was shown through fair treatment from males, giving females a sense of reciprocal, societal care, and solidarity in the workplace, giving the women a sense of belonging and boost to their self-worth. Some females found that their male counterparts exhibited patience, respect.

The Black race exhibited the highest challenges with combining work and family. This was mainly because they constituted the largest population of the sample at 39 out of 50 respondents. Females with children under 18 had higher means, than females without children under 18, indicating that they faced challenges in combining work and family. Married females also faced a challenge in combining work and family, with partners/spouses working part-time. The number of years worked for the organisation revealed that those with 6 months to 1 year, experienced the highest challenges in combining work and family. At the educational level, those with diploma qualifications showed the highest challenges in combining work and family.

The next section looks at Aim 3 and objective 4.

10.2.3. Aim 3: To evaluate the experiences of female ICT professionals that inform their decisions to leave or stay with the telecommunications organisation

The third aim of this study was to evaluate the experiences of female ICT professionals, which made them leave, or stay with the telecommunications organisation. Under the third aim, there was one objective: to determine which female ICT professionals' experiences, in terms of their personal and work lives, informed their decision to stay or leave an ICT job at the telecommunications company. The next section looks at the research objective.

10.2.3.1. Research objective

4. To determine what personal and work experiences, and challenges, female ICT professionals were currently facing, which could influence their decision to stay or leave their ICT job at the telecommunications company. The experiences as a result of gender stereotypes, and discrimination, in terms of the number of tasks allocated to the females, showed the male counterparts' negative conduct. Positive conduct of fair treatment from males, gave females a sense of reciprocal, societal care, and solidarity in the workplace, giving women a boost of self-worth. Some females experienced patience and respect from their male colleagues.

A challenge emerged from flexibility and time management. Females felt they were frequently afforded flexibility in the workplace by virtue of being women, hence this lessened the challenges of working in a male-dominated industry. Some participants stated that they did not have the time and flexibility to do other things, such as upgrading their education. Dependent adults/children-related tasks were also another challenge, as women often provided time and flexibility for those tasks, impacting their ability to do other activities they needed to do. Work/home interference: one group of females indicated that responsibilities such as home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare interfered with work-related tasks. Another group stated that engaging in work activities did not interfere with the home domain. Most of the employees viewed, the sense of accomplishment and skills acquisition, as more as benefits than a challenge, because this helped them be better friends and family members.

Other Challenges emanated from changes in home life over-time. In the Information and Communications Technology world, challenges stemmed from women having to stay away from the job, because of family commitments and responsibilities, such as childbearing and rearing, and improvement or lack of improvement in specialised skills. Another challenge of time emerged and was regarded as significant by female ICT professionals, as participants found themselves spending more time on household chores and taking care of the elderly. Flexibility emerged as an important benefit to career women's home life, in the use of work hours, reduced workweek, flexitime, telecommuting, which could be to their advantage as it freed more time to attend to personal issues.

10.3 Recommendations

The following section looks at the recommendations of the study. Firstly, recommendations to Telkom policy makers and organisational stakeholders are given. Secondly, recommendations to the individual ICT female professionals are provided.

10.3.1 Recommendations to Telkom policy makers and organisational stakeholders

Firstly; to consider the issue of work-life balance as a severe issue, that is confronting 21st-century employees, and to make proactive moves in that manner. Utilising this study's discoveries, employees will have a decent framework to work with, to lessen the contention between work and personal life.

Another recommendation is utilising this research, as a rule, to direct a similar kind of research, before actualising family-accommodating programmes, to decide on the necessities of working females in various related organisations.

This study's findings could assist the management of the telecommunications company to understand their role, in creating and sustaining good work-life balance programmes which are communicated and made public so that everyone has access to them. They would be better equipped to deal with challenges in maintaining a positive work-life balance environment for females, who are now increasingly entering previously male-dominated professions, like Information and Communications Technology. Working ICT females experience work-life conflict due to their position in the organisation. This can be from seniors or supervisors, their working hours, the distance they have to travel to work, and technology. Employees are never really away from work, as indicated by the fact that these females have to use flexitime, to enable them to work anywhere, and anytime given technology can easily keep them connected. There are various consequences of this conflict, such as; stress, burnout, health problems, less sleep, forgetfulness, displaced anger, absenteeism, and mental exhaustion.

Telkom policymakers and organisational stakeholders are recommended to set boundaries at work. The Telkom policymakers and organisational stakeholders should consider that the employees are humans, and they have limits. So, in formulating policies, they should set boundaries as to how, when, and for what purposes an employee can be contacted for work outside hours. Conflict resolution guides should be explicitly detailed and communicated so that employees do not conflict with their line managers. To promote wellness and well-being to avoid stress, burnout, health problems, less sleep, forgetfulness, anger, absenteeism, and

mental exhaustion, Telkom policymakers and organisational stakeholders should formulate interventions and preventive measures to look after the employees.

10.3.2 Recommendations to the individual ICT female professional

As found in this study, some females had invested heavily in the ICT profession. These females were willing to challenge the status quo to make the ICT sector female dominant. This could be done by challenging the existing gender stereotypes and biases, making it the best foundation for breaking the current stereotypes in careers and workplaces in South Africa. A recommendation is that women take advantage of the opportunities availed to them in bursaries and other educational incentives.

Another recommendation is for the female ICT professionals to create an adaptive lifestyle, by utilising innovative and flexible new ways to navigate work and family life. Modifying work schedules in ways that better accommodate family responsibilities would be one way. ‘Piggybacking’ other commitments or opportunities together to get the ‘best bang for her buck’ is another recommendation. Combining family activities, volunteerism, social activities, sporting and other events with friends, would also allow everyone to manage their time better in an enjoyable and satisfying manner.

Another recommendation to female ICT professionals would be that they are not afraid to take on the challenges that come with being in a male-dominated field. This all goes back to what the government put in place, in terms of policies with regards to training females, and parental schooling and nurturing. This study’s outcome is a work-life balance framework, as discussed in the following section.

10.4. A work-life balance framework

Telkom has in place the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the virtual assistant programme, *Telkom Touch*. Through this research and the participants’ responses, more can be done in terms of work-life balance, to improve the welfare of female ICT professionals. More emphasis could be directed towards accommodating the presence of females in this highly male-dominated industry.

As an outcome from this research, the researcher created a framework by adopting two theories of Border Theory (Clark, 2000), and Life Course Perspective (Giele & Elder, 1998), on how female ICT professionals balance work and family responsibilities.

The next section looks at Aim 4 and objective 5.

10.4.1. Aim 4: To develop a framework that may help with different work-life balance aspects in the South African context

The fourth aim of this study was to develop a work-life balance framework to a practical problem, on how female ICT professionals balance work and family responsibilities, at the telecommunications company. Under the fourth aim, there was one objective: to develop a work-life balance framework to a practical problem, on how female ICT professionals balance work and family responsibilities at the telecommunications company. The next section looks at the research objective 5.

10.4.2. Research objective

5. To develop a work-life balance framework to a practical problem, on how female ICT professionals balance work and family responsibilities, at the telecommunications company.

Telkom has in place the Telkom policy on Hours of Work: (Other Working Opportunities and Overtime) of 2015 and the virtual assistant programme, ***Telkom Touch***. Through this research and the participants' responses, more can be done in terms of work-life balance, to improve the welfare of female ICT professionals. More emphasis could be directed towards accommodating the presence of females in this highly male-dominated industry.

As an outcome from this research, the researcher created a framework by adapting and extending on two seminal theories of Border Theory (Clark, 2000), and Life Course Perspective (Giele & Elder, 1998), on how female ICT professionals balance work and family responsibilities. The resulting framework is formulated from available literature as well as the information collected in this study.

Figure 10.1. depicts the resulting work-life balance framework.

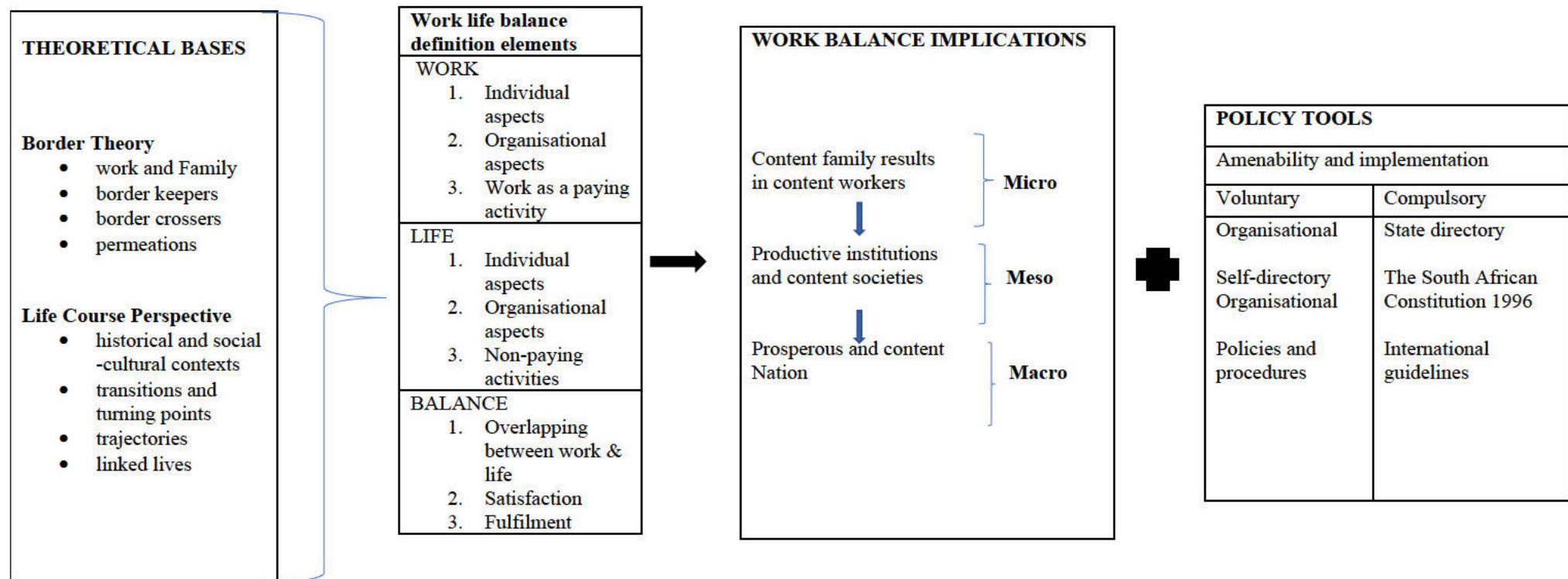


Figure 10. 1: The resulting work-life balance framework

10.4.3. Conceptualisation of the resulting work-life balance framework

It is vital to understand the problem being addressed before developing the appropriate framework. The current framework addresses work-life balance questions. A model's purpose, level of detail, and complexity determine the type of model. The method of identifying key concepts begins with picking out key terms from the problem statement and research.

Literature reviews, example articles, and benchmarking surveys related to organisational or employer perspectives on the measurement of work-life performance were conducted to identify indicators and criteria for measuring work-life and to identify performance standards. Taking the problem from a global perspective to a regional then South African perspective aided the researcher to contextualise the problem from there and also link the various labour legislations from South Africa and the International Labour Organisation's laws that govern work-life balance. The exploration of the individual to the work environment and the adopting of the Border Theory (Clark, 2000), and Life Course Perspective (Giele & Elder, 1998) as they related to the challenges faced by the female ICT professionals is what the framework aims to achieve. The next section now explains the different aspects of the resulting work-life balance framework

10.4.4. Theoretical bases

This was identified in Chapter 3 in the discussion of the Border Theory (Clark, 2000), and Life Course Perspective (Giele & Elder, 1998). The two theories are useful blueprints for examining work-life balance implications.

10.4.5. Work life balance definition elements

The ICT industry is underpinned by a digital platform, to enable quick access throughout the world at large. Statistics South Africa makes the labour force market indicators available, in terms of the number of women in traditionally male-dominated industries, among other indicators. These are all dimensions that may not necessarily need to be encapsulated into public policy. The government can encourage businesses to introduce voluntarily, thus offer organisations more meaningful choices to pursue better work-life balance policies and procedures. The information collected in this study on work-life balance through the online questionnaire and the interviews were a useful aid in the formulation of this framework. As such, these are included in the resulting framework.

10.4.6. Work balance implications

The first dimension of the framework would be; to incorporate policy purposes, to pursue work-life balance aims, either in its entirety or as broken down into the essential elements, identified in Chapter 4, in the discussion of the Border theory, and the Life Course Perspective, which are useful blueprints for examining work life balance implications that incorporate the elements of Figure 4.1: The importance of maintaining work-life balance in Chapter 4. Work-life balance programmes should be the smallest societal unit, which is the family, and because it is the smallest unit, this may often lead to it being ignored. This is under the microsystem. Taking this unit into consideration leads to contentment in families, which results in content workers. The second unit to be looked at would be the organisations these workers form part of, and this would be under the mesosystem. Having content workers, leads to highly productive institutions. This has massive implications for the macro system, which in this case, is the nation. Having well-established family units and highly productive institutions, leads to a prosperous and content nation.

10.4.7. Policy tools

The framework's final elements are the building blocks of a policy that is at the same standard as international policy. Some respondents indicated the importance of advancing women, by looking at South Africa's apartheid history, and incorporating an adherence to the South African constitution of 1996, and international policies. A policy may also require organisations to report on the implementation of work-life balance measures, and; this may be incorporated into existing reporting frameworks. A work-life balance policy statement may also be influenced by international guidelines, such as the International Labour Organisation's Convention No. 156 that requires signatories to make it a national arrangement for all laborers with family duties.

10.4.8. Impact of the framework

The framework and future implementation may have a direct and indirect impact on female ICT professionals, in understanding their expectations, attitudes, experiences, and prejudices. The development of the framework involved females in the ICT department and helped understand the unique experiences these female faces in a traditionally male-dominated sector.

10.4.9. Limitations of the framework

It may take time to monitor the framework's processes development as it will involve considering the meso, micro and macro factors, for instance. Evaluation of the framework may

also only be done with female ICT professionals. This study's qualitative aspect (as it is context-specific) implies that more research needs to be done, to gain more inputs from real-world settings, and maybe other industries, to improve on the framework. To also enhance the framework, more quantitative data would have to be given more options.

10.5. Original contribution of the study

There have been numerous studies done on women's work-life balance in a variety of industries in South Africa. This study is unique in that it investigates work-life balance amongst female Information Communications and Technology professionals in South Africa. They work in a male-dominated Science, Technology, Engineering, and Mathematics (STEM) sector; therefore, many of the policies and practices have been designed for men by men. Thus, the study gives us unique insight into how these females cope with their work-life challenges in their chosen careers.

This study is a multi-disciplinary study situated in several disciplines, such as organisational behaviour, management studies, and gender studies. Therefore, it adds to the existing body of knowledge, by providing a multi-disciplinary approach to the concept of work-life balance, which also affects other male-dominated sectors other than technology. Previous researchers on work-life balance, have examined the phenomenon using one method to extract data from participants, either using a quantitative or qualitative approach. Therefore, this study is unique, as it highlights the perceptions and experiences of female Information and Communications Technology professionals. From recent reviews conducted, it was clear that many studies were not South African-based. This study contributes to bridging the knowledge gap of the literature on work-life balance experiences of female Information and Communication Telecommunications professionals in South Africa. This study is distinctive as it also contributes to the existing body of knowledge, by providing a mixed-methods approach, to exploring experiences of female Information and Communication Technology professionals in a South African context. This research aimed to develop a framework that may help with different work-life balance aspects in the South African context.

By adopting a mixed methodology research design, the study at the host institution Telkom investigated and evaluated the work-life balance experiences of female Information and Communication Telecommunications professionals, thereby making a unique contribution to the existing body of knowledge on work-life balance. This original research aimed to add to existing scholarship on work-life balance, by examining an all-female sample of respondents; as earlier indicated, many studies on work-life balance are not South African-based. This study focused on a unique context that is South African.

By engaging with mainly female South African respondents, different work-life balance characteristics could be highlighted from gender, ethnic, and cultural perspectives. This study also developed a framework that gave a holistic approach of looking at work-life balance from, a macro-level (International work-life balance perspective), meso-level (South African work-life perspective), and micro-level (Organisational work-life perspective) of analysis.

By examining the work-life balance experiences of female Information and Communication Telecommunications professionals in South Africa, this study contributes to the scarcity of studies focusing on work-life balance experiences of female Information and Communication Telecommunications professionals.

The current study adapts and extends the Life Course Perspective (Giele & Elder, 1998) and the Border Theory (Clark, 2000) resulting in a work-life balance framework hence linking these two seminal theories to women in the ICT sector in South Africa making this the very first study to do so.

10.5.1. Theoretical contributions

This study adds to the gap in the existing body of knowledge of the work-life balance domain in many ways, particularly that of female Information and Communications Technology employees within South African organisations. The world of work is changing, and organisations need to incorporate this, redesign their flexible practices to be accessible to every employee, including employees who fall under various categories of marital status, different age groups, and whether the employees are parents or not. Seminal theories of the Life Course perspective and the Border theories were adapted and extended on to provide a new insight of what resulted in terms of trying to understand women in a male-dominated field.

The theories were also used to explain and understand why respondents behaved the way they did. This study adds to the gap in the current academic discourse around the concept of the work-life balance domain within a South African context.

10.5.2. Managerial Contributions

Prior to this study, little was known about female ICT professionals in telecommunications within a South African context. Despite studies carried out on women in terms of work-life balance, no study has been done in telecommunications sector which combines theories of the Life Course perspective and the Border theories to understand women in the telecommunications sector in South Africa. This study explored female ICT professionals'

experiences in trying to balance their work and their non-work responsibilities. This study created an appropriate work-life balance framework to solve how female ICT professionals could balance work and family responsibilities at Telkom. Telkom could improve its policies or practices by employing gender-based mentorship programmes, strengthening its involvement in the transformation agenda through ongoing compliance with South African legislation by inserting transformation and empowerment into its strategy. It is recommended that Telkom could further develop transformation interventions centered on sensitivity training and diversity awareness practices. Telkom SA could utilise this study's results to develop appropriate work-life balance and Human Resource strategies to create flexible workplaces conducive to the attraction, motivation, and retention of highly valued employees.

10.6. Directions for future research

In the future, a comparative study can be sought, and the topic of the study could be extended to other male-dominated industries. The current study was limited to one organisation, therefore consideration could be given to conducting a similar study in an expanded population to generate more knowledge on the subject. In this study, males were not part of the population. Future research could include males and compare them to females to explore how females advance in male-dominated sectors. The perceptions, experiences and views of males could then be compared to those of the females. Future research can seek to obtain perceptions, experiences and views of females who previously worked in male-dominated fields and left for gender-balanced organisations in an effort to gain a different and richer perspective and compare those to females who currently work in male-dominated sectors.

10.7. Conclusion

In this chapter, the conclusions relating to themes, research aims, and objectives of the work-life balance framework were discussed. Recommendations to Telkom policymakers and organisational stakeholders, and the individual ICT female professionals were also discussed. A work-life balance framework resulted from this study that addressed the various aspects of the framework like the theoretical bases, work-life balance definition elements, policy tools, the impact of the framework, and the limitations of the framework. The original contribution of the study was also discussed. The resultant explanatory framework may be utilised to promote work-life balance effectively.

11. References

- Abiola, J. 2013. An Assessment of Information and Communication Technology Effectiveness
- Agarwal, R., & Malhotra, G. 2016. Women and access to ICT: A case study of India. *African Journal of Business Management*, 10(11): 288-297.
- Ajith, M., & Vidya, S. 2013. An Empirical Study on Work-life balance for Role Prioritisation of IT Employees. *RVIM Journal of Management Research*, 5(1):31–40.
- Akamanzi, C., Deutscher, P., Guerich, B., Lobelle, A., & Ooko-Ombaka, A. 2016. Silicon Savannah: the Kenya ICT services cluster. *Microeconomics of Competitiveness*.
- Al-Alawi, A.I. 2016. Status of Bahraini Women in the Banking and Financial Sector: Challenges and Opportunities. *Journal of International Women's Studies*, 17(4): 210-228.
- Al-Asfour, A., Tlaiss, H.A., Khan, S.A. and Rajasekar, J. 2017. Saudi women's work challenges and barriers to career advancement. *Career Development International*.
- Alghamdi, F. 2017. *Why do female students choose to study CS in the Kingdom of Saudi Arabia?* 2017 International Conference on Learning and Teaching in Computing and Engineering (LaTICE), Hong Kong, April 20-23, 49-53.
- Allen, R. E., & Hawes, D. K. 1979. Attitudes toward work, leisure and the four-day workweek. *Human Resource Management*, 18(1): 5-10.
- Allen, T. 2001. Family-Supportive work environments: The role of organisational perceptions. *Journal of Vocational Behaviour*, (58): 414–435.
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. 2013. Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66: 345-376.
- Allvin, M., Hagstrom, G., Gunn, T., & Lundberg, U. 2013. *Boundless work - social psychological perspective on the new working life*. Libor: Malmö.
- Alutu, A. N. & Audu, V. E. I. 2009. Female Participation in Information, Communication and Technological Development in Nigeria: Implications for Early Career Guidance. *J. Soc. Sci.*, 19(2): 163-166.
- Amondi, O.B. 2011. Representation of women in top educational management and leadership positions in Kenya. *Advancing Women in Leadership*, 31(1): 57–68.
- Andam, A.B., Dawson, S.P, Horton, K.R., & Sandow, B. 2005. Balancing family and career. *AIP Conference Proceedings*, 795(1): 25-27.
- Andres, L. 2012. *Design and Doing Survey Research*. London: Sage Publications Inc.
- Anitha, J. 2014. Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*,

- 63(3): 308–323. Available from: <https://doi.org/10.1108/jppm-01-2013-0008> [Accessed: 16 April 2018].
- Anitha, K., & Maheswari, U. 2014. Work life balance, women, banking: Theoretical framework of work life balance. *GJRA - Global Journal for Research Analysis*, 3(12): 126–128.
- Anonymous. 2012. Weakness in South Africa's progress with women's equality in the Millennium development goals. *Agenda: Empowering women for gender equity*, 26 (1): 91-103.
- Anyaku, O.R. 2019. The challenges and effects of work-life balance on organisational performance of Nigerian women employees: A case study of Lagos State (*Masters dissertation*). National College of Ireland.
- Appiah, F., Poku, O., & Acheampong, F. 2014. Work-life balance practices and female lecturers' career progression in Ghana. *Asian Journal of Management Research*, 10(3): 2229-3795.
- Armstead, L. S. 2015. Balancing the life: A case study on single African American working mothers (Order No. 3712038). Available from ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences Collection. (1709243840). Retrieved from <http://search.proquest.com/docview/1709243840?accountid=10359> [Accessed: 17 May 2018].
- Armstrong, D.J., Reimenschneider, C.K., Reid, M., & Allen, M. 2007. Advancement, voluntary turnover and women in IT: a cognitive study of work-family conflict. *Information and Management*, 44 (2): 142-153.
- Ashcraft, C., McLain, B., & Eger, E. 2016. *Women in tech: The facts*. National Center for Women & Technology (NCWIT).
- Association of Graduate Recruiters. 2008. *Skills for Graduates in the 21st Century*. Association of Graduate Recruiters, Cambridge.
- Awung, M., & Dorasamy, N. 2015. The impact of domestic chores on the career progression of women in higher education: the case of the Durban University of Technology, *Environmental Economics*, 6(4): 94-102.
- Azami-Aghdash, S., Ghojzadeh, M., Gareh-Sheyklo, S., Daemi, A., Kolaheidouzan, K., Mohseni, M., & Moosavi, A. 2015. Breast cancer screening barriers from the woman's perspective: a meta-synthesis. *Asian Pac J Cancer Prev*.
- Balamurugan, G., & Sreeleka, M. 2020. A Study on Managing Conflict among Women Employees in IT Sector Bangalore. *International Journal of Engineering and Management Research*, e-ISSN, 2250-0758.

- Bandias, S., & Warne, L. 2009. *Women in ICT – Retain and Sustain: An Overview of the ACS-W Survey*. 20th Australasian Conference on Information Systems: Women in ICT – Retain and Sustain 2-4 Dec 2009, Melbourne.
- Baral, R., & Bhargava, S. 2010. Work-family enrichment as a mediator between organisational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology*, 25(3): 274-300.
- Barber, L. K., Grawitch, M. J., & Maloney, P. W. 2016. *Work-life balance: Contemporary perspectives*. In M. J. Grawitch, & D. W. Ballard (Eds.). *The psychologically healthy workplace: Building a win-win environment for organisations and employees* (111–133). Washington, DC: American Psychological Association.
- Barbieri, D., Lelleri, R., Maxwell, K., Mollard, B., Karu, M., Salanauskaitė, L., & Reingardė, J. 2018. Women and men in ICT: a chance for better work–life balance Research note. European Foundation for the Improvement of Living and Working Conditions: European Institute for Gender Equality. Luxembourg: Publications Office of the European Union.
- Baringoltz, E., & Gauna, B. M. 2014. Situación de género en los Grupos de I+D en TIC [Gender situation in R & D Groups in ICT]. Ministerio de Ciencia y Tecnología (MINCYT), Argentina from http://www.ragcyt.org.ar/descargas/3521_doc.pdf. [Accessed: 4 November 2019].
- Batool, S.Q., & Sajid, M.A. 2013. Barriers faced by women managers at universities. *Middle East Journal of Scientific Research*, 13 (3): 324-378.
- Bellavia, G. M., & Frone, F. R. 2005. *Work–family conflict*. In J. Barling, E.K Kelloway & M.R. Frone (Eds.), *Handbook of work stress*. CA: Thousand oaks, Sage.
- Bencheva, N., Kostadinov, N., & Tsvetkova, I. 2018. Women in Information and Communication Technologies and How to Attract Them. In 2018 28th EAEEIE Annual Conference (EAEEIE) (1-9). IEEE. Bengaluru, India. *International Journal of Research – GRANTHAALAYAH*, 119-130.
- Bengston, V. L., & Allen, K. R. 1993. *The Life Course Perspective Applied to Families Over Time* 469-504 in *Sourcebook of Family Theories and Methods: A Contextual Approach*, edited by P.G. Boss, W.J. Doherty, R. LaRossa, W.R. Schumm, and S.K. Steinmetz. New York: Plenum Press.
- Beninger, A. 2014. *High Potentials in Tech-Intensive Industries: The Gender Divide in Business Roles*, New York: Catalyst.

- Berg, B. L. 2009. *Qualitative Research Methods for the Social Sciences*. 7th ed. Allyn and Bacon, Pearson.
- Bernardi, L., & Klärner, A. 2014. Social networks and fertility. *Demographic Research*, 30, 641-670.
- Bernardi, L., Huinink, J., & Settersten, R. A. 2019. *The life course cube: A tool for studying lives*. *Advances in Life Course Research*, in press, 41, 100258. <https://doi.org/10.1016/j.alcr.2018.11.004>.
- Bertram, C., & Christiansen, I. 2014. *Understanding Research: An Introduction to Reading Research* (1st ed.). Pretoria: Van Schaik.
- Bhatnagar, D., & Rajadhyaksha, U. 2001. Attitudes towards work and family roles and their implications for career growth of women: A report from India. *Sex Roles*, 45(7-8): 549-565.
- Bianchi, S. M., Robinson, J. P., & Milke, M. A. 2006. *The Changing Rhythms of American Family Life*. Russell Sage Foundation.
- Bianchi, S. M., Sayer, L. C., Milkie, M. A., & Robinson, J. P. 2012. Housework: Who did, does or will do it, and how much does it matter? *Social Forces*, 91(1): 55–63.
- Bianchi, S.M. & Mattingly, M.J. 2004. *Time, Work, and Family in the United States*. In J.Z. Giele & E. Holst (Eds.), *Changing Life Patterns in Western Industrial Societies* (pp: 95-118). New York: Elsevier Ltd.
- Bird, B. 2010. *Why family and work conflict and what to do about it*. New York, NY: Oxford, Oxford University Press.
- Biron, C., & Burke, R.J. eds. 2014. *Creating healthy workplaces: Stress reduction, improved well-being, and organisational effectiveness*. Ashgate Publishing, Ltd.
- Blanche, M., Durrheim, K., & Painter, D. 2010. *Research in Practice* (2nd ed.). Cape Town: Univ. of Cape Town Press
- Blomstrand, E., & Sang, E. 2016. A Piquant Element in a Male-Dominated World: A study of women and career in the ICT Industry.
- Bloom, P. 2015. Work as the contemporary limit of life: Capitalism, the death drive, and the lethal fantasy of ‘work–life balance.’ *Organisation*, 23(4): 588–606.
- Bobbitt-Zeher, D. 2011. Gender discrimination at work: Connecting gender stereotypes, institutional policies, and gender composition of workplace. *Gender & Society*, 25(6): 764-786.
- Bombuwela, P. M. & Chamaru, D. A. A. 2013. Effects of Glass Ceiling on Women Career Development in Private Sector Organisations – Case of Sri Lanka. *Journal of Competitiveness*, 5 (2): 3-19.
- Bosch, A. 2011. *Women’s Report. The South African Board for People Practices*. South Africa.

- Bourke, J. E. 2009. *Elder care, self-employed women and work-family balance: An exploration using work-family border theory. Unpublished master's thesis*. Massey University, Palmerston North, New Zealand.
- Brandth, B., & Kvande, E. 2001. Flexible Work and Flexible Fathers. *Work, Employment and Society*, 15(2): 251-67.
- Brannen, J. 2017. *Mixing methods: Qualitative and Quantitative Research*. Routledge.
- Braun, S., & Peus, C. 2018. Crossover of work-life balance perceptions: Does authentic leadership matter? *Journal of Business Ethics*, 149(4): 875-893.
<https://doi.org/10.1007/s10551-016-3078-x>.
- Brimmer, A. V. 2013. One big, not-so-happy family. *HR Magazine*, 58(10): 32–33.
- Broadband Infraco. 2014. *Corporate Profile*. Retrieved from www.infraco.co.za:
<http://www.infraco.co.za/CorpProfile/default.aspx> [Accessed: 17 May 2018].
- Brue, L.K. 2018. Work-life balance for women in stem leadership. *Journal of Leadership Education*. DOI: 10.12806/V18/I2/R3.
- Bryman, A. 2008. *Social Research Methods*. 3rd edition. Oxford: Oxford University Press.
- Bryman, A. 2012. *Social research methods*. Oxford: Oxford University Press.
- Bryman, A., & Bell, E. 2015. *Business research methods*. Oxford university press.
- Bryson, V. 2007. *Gender and the politics of time: Feminist theory and contemporary debates*. Bristol, England: The Policy Press.
- Bryson, V. 2007. *Gender and the politics of time: Feminist theory and contemporary debates*. Bristol, England: The Policy Press.
- Buitendach, J.H., & Rothmann, S. 2009. The Validation of the Minnesota Job Satisfaction Questionnaire in selected organisations in South Africa. *SA Journal of Human Resource Management*, 7, 1-8.
- Burns, N., & Grove, S.K. 2011. *Undertaking nursing research: Building an evidence-based practice*. Amsterdam: Elsevier.
- Calitz, A., Evert, C., & Cullen, M. 2015. Promoting ICT Careers Using a South African ICT Career Portal. *The African Journal of Information Systems*, 7 (2): 40-57.
- Caprile, M., & Vallés, N. 2010. *Meta-analysis of Science as a Labour Activity*, Topic Report, Meta-analysis of Gender and Science Research, RTD-PP-L4-2007-1, available at: http://www.genderandscience.org/doc/TR4_Labour.pdf [Accessed: 22 October 2019].
- Carcary, M. 2009. The Research Audit Trial--Enhancing Trustworthiness in Qualitative Inquiry. *Electronic Journal of Business Research Methods*, 7(1).
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. 2014. The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41: 545-547.

- <https://doi.org/10.1188/14.ONF.545-547>.
- Casper, W. J., Weltman, D., & Kwesiga, E. 2007. Beyond family-friendly: The construct and measurement of singles-friendly work culture. *Journal of Vocational Behaviour*, 70(3): 478-501.
- Cassar, L., & Meier, S. 2018. Nonmonetary Incentives and the Implications of Work as a Source of Meaning, *Journal of Economic Perspectives*, 32 (3):215-38.
- Castaño, C., C., & Webster, J. 2011. Understanding women's presence in ICT: The life course perspective. *International Journal of Gender, Science and Technology*, 3(2): 364-386.
- Catalyst. 2014. *High potentials in tech-intensive industries: The Gender Divide in Business Roles*. [Online]. Available from www.catalyst.org [Accessed 20 May 2020].
- Cervia, S., & Biancheri, R. 2017. Women in science: The persistence of traditional gender roles: A case study on work-life interface. *European Educational Research Journal*, 16(2-3): 215-229.
- Cha, Y. 2013. Overwork and the persistence of gender segregation in occupations. *Gender & Society*, 27. Available from: *PsycARTICLES* database. Available from: <http://dx.doi.org/10.1177/0891243212470510> [Accessed: 2 March 2019].
- Chabowski, B.R. & Mena, J.A. 2017. A Review of Global Competitiveness Research: Past Advances and Future Directions. *Journal of International Marketing*, 25 (4): 1-24.
- Chakravorti, B., Chaturvedi, R., & Tunnard, C. 2015. Where the digital economy is moving the fastest. *Harvard Business Review*.
- Chandra, V. 2012. Work-life balance: Eastern and western perspectives. *The International Journal of Human Resource Management*, 23(5): 1040-1056.
- Charmaz, K. 2014. *Constructing grounded theory*. CA: Thousand oaks, Sage.
- Charmes, Jacques. 2015. Time Use Across the World: Findings of a World Compilation of Time-Use Surveys. Working Paper for the Human Development Report 2015, UNDP-HDRO. <http://www.hdr.undp.org/en/content/time-use-across-worldfindings-world-compilation-time-use-surveys> [Accessed: 29 November 2019].
- Cherry, K. 2010. Cross-sectional research. Retrieved from: <http://about.com>
<http://psychologyabout.com/od/cindex/g/gross-sectional>
<http://dx.doi.org/10.1177/0891243212470510> [Accessed: 29 November 2019].
- Chesley, N. 2014. Information and communication technology use, work intensification and employee strain and distress. *Work, Employment & Society*, 28(4): 589-610. Available from: <https://doi.org/10.1177/0950017013500112> [Accessed: 25 July 2018].

- Chesley, N., & Johnson, B. 2010. Information and communication technology, work, and family. *Work and Family Encyclopedia*. Boston, MA: Sloan Work and Family Research Network Chestnut Hill.
- Chisiza, M. 2017. No woman left behind: The gender digital divide. *Analysis, South Africa Institute of International Affairs (SAIIA)*. Available from: <https://www.saiia.org.za/opinion-analysis/no-womwn-left-behind-the-gende-digital-divide>. [Accessed: 4 November 2019].
- Choroszewicz, M., & Adams, T.L. 2019. Gender and Age in the Professions: Intersectionality, Meta-work, and Social Change *Professions & Professionalism*, 9 (2): 1-13 <https://doi.org/10.7577/p3432>
- Chou, H. Y., Hecker, R. O. B., & Martin, A. 2012. Predicting nurses' well-being from job demands and resources: A cross-sectional study of emotional labour. *Journal of Nursing Management*, 20(4): 502–511.
- Chung, H., & Van der Lippe, T., 2018. Flexible working, work–life balance, and gender equality: Introduction. *Social Indicators Research*, 1-17.
- Clark, S. 2002. Employees' sense of community, sense of control, and work/family conflict in Native American Organisations. *Journal of Vocational Behaviour*, 61(1): 92–108.
- Clark, S. C. 2000. Work/family Border Theory: A new theory of work/family balance. *Human Relations*, 53(6): 747–770.
- Clark, S. C. 2000. Work/family Border Theory: A new theory of work/family balance. *Human Relations*, 53(6): 747–770.
- Clark, S.C. 2001. Work cultures and work/family balance. *Journal of Vocational Behaviour*, 58(2): 348–365
- Cockburn, C., & Ormrod, S. 1994. *Masculinity and Technology: Making Meaning, Giving Value, Achieving Dominance*. In: E. Gunnarsson & L. Trojer (ed) *Feminist Voices on Gender, Technology and Ethics*.
- Cohen, L., Manion, L., & Morrison, K. 2009. *Research Methods in Education* (6th Edition). London: Routledge.
- Cokluk, D. Kocak, D. 2016. Using Horn's Parallel Analysis method in exploratory factor analysis for determining the number of factors. *Educational Sciences: Theory and Practice*, 16(2): 537-551.
- Conner, B. 2017. Descriptive statistics. *American Nurse Today*, 12 (11): 52-55.
- Cooper, D. R., & Greenway, M. 2015. *Non-probability survey sampling in official statistics*. Retrieved from <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/gss-methodology-series/ons-working-paper-series/mwp3-non-probability-survey-sampling-in-official-statistics.pdf> [Accessed: 13 January 2019].

- Cooper, D., & Schindler, P. 2014. *Business Research Methods* (12th ed.). New York: McGraw-Hill Education.
- Costello, A.B. & Osborne, J.W. 2005. Exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, 10(7): 1-9.
- Cox, T. H., & Harquail, C. V. 1991. Career paths and career success in the early career stages of male and female MBAs. *Journal of Vocational Behaviour*, 39: 54–75
- Cranswick, K., & Dosman, D. 2007. Eldercare: What we know today. Statistics Canada, general social survey 2007. available from <http://www.statcan.gc.ca/pub/11-008-x2008002/article/10689-eng.htm> [Accessed: 4 June 2020].
- Creswell, J., W. 2014. *Research Design, Qualitative, Quantitative & Mixed Methods Approaches* (4th ed.). Los Angeles, CA. Sage.
- Creswell, J.W., & Clark, V.L.P. 2017. *Designing and conducting mixed methods research*. Sage publications.
- Creswell, J.W., Klassen, A.C., Plano Clark, V.L., & Smith, K.C. 2011. Best practices for mixed methods research in the health sciences. Bethesda (Maryland): *National Institutes of Health*, 2013: 541-545.
- Creswell, JW & Plano Clark, VL. 2011. *Designing and conducting mixed methods research*. 2nd edition. California: Sage.
- Crowley, J. E., & Kolenikov, S. 2014. Flexible work options and mothers' perceptions of career harm. *The Sociological Quarterly*, 55(1): 168–195.
- Curry, L. A., Nembhard, I. M., & Bradley, E. H. 2009. Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, 119(10): 1442–1452.
- Dancaster, L. & Cohen, T. 2010. 'Workers with Family Responsibilities: A Comparative Analysis to Advocate for the Legal Right to Request Flexible Working Arrangements in South Africa. *South African Journal of Labour Relations*, 34(1): 31–45.
- de Maar, M. 2019. Work-Life Balance among IT Executives in the Western Cape. (*Master's thesis*). University of the Western Cape. Cape Town.
- De Villiers, J., & Kotze, E. 2003. Work-life balance: A study in the petroleum industry. *SA Journal of Human Resource Management*, 1(3): 15–23.
- Deanscombe, M. 2017. *The Good Research Guide for Small Scale Research Projects*. (5th ed). Open University Press: McGraw Hill Educations.
- Deery, M., & Jago, L. 2009. A framework for work-life balance practices: Addressing the needs of the tourism industry. *Tourism and Hospitality Research*, 9(2): 97–108.
- Delecta, P. 2011. Review article: Work life balance. *International Journal of Current Research*, 4: 186-189.

- Delgado, E., & Canabal, M. 2006. Factors associated with negative spillover from job to home among latinos in the United States. *Journal of Family and Economic Issues*, 27: 92–112.
- Delina, G. & Raya, R. P. 2013. A study on work-life balance in working women. *International Journal of Commerce, Business and Management*, 2(5): 74–282.
- Demerouti, E, Derks, D., Lieke, L., & Bakker, A.B. 2014. New ways of working: Impact on working conditions, work–family balance, and well-being. In: *The impact of ICT on quality of working life*. Springer. 123–141.
- Den Dulk, L., Groeneveld, S., Ollier-Malaterre, A., & Valcour, M. 2013. National context in work-life research: A multi-level cross-national analysis of the adoption of workplace work-life arrangements in Europe. *European Management Journal*, 31(5):478–494.
- Denzin, N. K., & Lincoln, Y. S. 2005. *The SAGE handbook of Qualitative Research* (3rd ed.). Thousand Oaks, CA: Thousand Oaks. Sage.
- Department of Women, Youth and People with Disabilities. 2019. Beijing +25 South Africa's Report on the Progress made on the Implementation of the Beijing Platform for Action 2014-2019. University of Cape Town: Cape Town, South Africa.
- Derks, B. 2017. Queen bee syndrome. In: Rogelberg, S. G. (eds.) *The SAGE Encyclopedia of Industrial and Organisational Psychology*. 2nd edition. Thousand Oaks, California: SAGE Publications.
- Derks, B., Laar, C. V., & Ellemers, N. 2016. The queen bee phenomenon: Why women leaders distance themselves from junior women. *The Leadership Quarterly*. <http://dx.doi.org/10.1016/j.leaqua.2015.12.007> .
- Derks, D., Brummelhuis, L. L., Zecic, D., & Bakker, A. B. 2014. Switching on and off ...: Does smartphone use obstruct the possibility to engage in recovery activities? *European Journal of Work and Organisational Psychology*, 23(1): 80–90.
- Derks, D., van Duin, D., Tims, M., & Bakker, A. B. 2015. Smartphone use and work-home interference: The moderating role of social norms and employee work engagement. *Journal of Occupation and Organisational Psychology*, 88(1): 155–177.
- Desrochers, S., & Sargent, L. D. 2004. Boundary/border theory and work-family integration. *Organisation Management Journal*, 1(1): 40–48.
- Desrochers, S., & Sargent, L. D. 2004. Boundary/border theory and work-family integration. *Organisation Management Journal*, 1(1): 40–48.
- DeVellis, R.F. 2012. *Scale development: Theory and Applications* (3rd ed). Thousand Oaks, California: Sage.
- Dhas, D. B. & Karthikeyan, P. 2015. Work-Life Balance Challenges and Solutions: Overview.

- International Journal of Research in Humanities and Social Studies*, 12(2).
- Dikkers, J., van Engen, M., & Vinkenburg, C. 2010. Flexible work: Ambitious parents' recipe for career success in the Netherlands. *Career Development International*, 15(6): 562–582.
- Dikko, M. 2016. Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in Takaful (Islamic Insurance). *The Qualitative Report*, 21(3): 521–528.
- Dilworth, L.J.E. 2004. Predictors of Negative Spill over from Family to Work. *Journal of Family Issues* 25: 241-261.
- Dizaho, E. K., Salleh, R., & Abdullah, A. 2017. Achieving work life balance through flexible work schedules and arrangements. *Global Business and Management Research*, 9(1): 455-465. Retrieved from <https://gbmr.ioksp.com> [Accessed: 20 October 2019].
- Dotti Sani, G. M., & Treas, J. 2016. Educational gradients in parents' child-care time across countries, 1965–2012. *Journal of Marriage and Family*, 78(4): 1083–1096.
- Doubell, M., & Struwig, M. 2014. Perceptions and factors influencing the career success of professional and businesswomen in South Africa. *Journal of Economic and Management Sciences*, 17(5): 531–543.
- Downes, C., & Koekemoer, E. 2011. Work-life balance policies: Challenges and benefits associated with implementing flexitime. *SA Journal of Human Resource Management*, 9(1): 1–13
- Doyle, S. 2013. Reflexivity and the capacity to think. *Qualitative Health Research*, 23, 238–255. <https://doi.org/10.1177/1049732312467854>.
- Du Plessis, Y., & Barkhuizen, N. 2015. Career path barriers experienced by women engineers. In *12th European Academy of Management Conference, Rotterdam, Netherlands*. 14: 2013. Retrieved from: <http://www.optentia.co.za/publications.php> [Accessed: 7 May 2018].
- Duszynski, L. 2018. Family, Community, and Peer Factors in Substance Abuse Recovery and School Achievement (Doctoral Dissertation). Retrieved from <https://scholarworks.waldenu.edu/dissertations/5459/> [Accessed: 20 August 2019].
- Dworkin, S.L. 2012. Sample size policy for qualitative studies using in-depth interviews. 1319-1320.
- Eckert, S. A. 2013. What do teaching qualifications mean in urban schools? A mixed-methods study of teacher preparation and qualification. *Journal of Teacher Education*, 64(1), 75-89.

- Ede, L., & Rantakeisu, U. 2015. Managing Organized Insecurity: The Consequences for Care Workers of Deregulated Working Conditions in Elderly Care. *Nordic Journal of Working Life Studies*, 5, 55-70.
- Elder Jr, G. H. 1974. *children of the great depression: social change in life experience*. Chicago: University of Chicago press.
- Elder Jr, G. H. 1995. The life course paradigm: Social change and individual development.
- Elder Jr, G. H., & Johnson, M. K. 2003. *The Life Course and Aging: Challenges, Lessons, and New Directions.* (49 – 81) in *Invitation to the Life Course: Toward New Understandings of Later Life*, edited by Richard A. Settersten Jr. New York: Baywood Publishing Company Inc.
- Elnaggar, A. 2007. The Status of Omani women in the ICT sector, *International Journal of Education and Development using Information and Communication Technology. (IJEDICT)*, 3(3): 4 – 15.
- Elson, D. 2005. Progress of the World's Women 2005. UNIFEM Biennial Report, United Nations Development Fund for Women, New York.
- Emory. 2008. Is this the year —equal pay for equal workl is addressed? Knowledge @ Emory, 11 September. Wharton School of the University of Pennsylvania. from <http://knowledge.emory.edu/article.cfm?articleid=1175> [Accessed 3 November 2020]
- Emslie, C., & Hunt, K. 2009. Live to work 'or 'work to live? A qualitative study of gender and work-life balance among men and women in mid-life. *Gender, Work & Organisation*, 16(1): 151–172.
- Emslie, C., Hunt, K., & Macintyre, S. 2004. Gender, work-home, and morbidity amongst white collar bank employees in the United Kingdom. *International Journal of Behavioural Medicine*, 11: 127–134.
- Engelbrecht, S. 2014. *Women on executive and board levels in South Africa's Finance Sector: Why so few? (Unpublished masters' thesis)*. Stellenbosch University, Stellenbosch.
- Equal Opportunities Commission (EOC). 2004. *Modern apprenticeships and gender equality*, Glasgow: Equal Opportunities Commission Scotland.
- Eslamian, J., Moeini, M., & Soleimani, M. 2015. Challenges in nursing continuing education: A qualitative study. *Iranian Journal of Nursing & Midwifery Research*, 20: 378–386.
- Esselaar, S, Gillwald, A., & Stork, C. 2007. South African telecommunications sector performance review 2006. *LINK Centre public policy research paper: Graduate School of Public and Development Management, University of the Witwatersrand*. (8):1–64.

- Eurofound. 2017. *European Quality of Life Survey 2016: Quality of Life, Quality of Public Services, and Quality of Society*. Luxembourg: Publications Office of the European Union, ISBN 978-92-897-1622-2.
- European Commission Information Society and Media (ECISM). 2010. *Women in ICTs*. Brussels: European Commission Information Society and Media.
- European Commission Information Society and Media (ECISM). 2013. *Women in ICTs*. Brussels: European Commission Information Society and Media.
- Eurostat. 2016. Archive: Europe 2020 Indicators—Research and Development. https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Archive:Europe_2020_indicators_-_research_and_development [Accessed: 28 August 2018].
- Evans, A. M., Carney, J. S., & Wilkinson, M. 2013. Work-life balance for men: Counselling implications. *Journal of Counselling and Development*, 91(4): 436–441. <https://doi.org/10.1002/j.1556-6676.2013.00115.x>.
- Facer, R. L., Wadsworth, L. L., & Arbon, C. A. 2009. Cities leading the way: The use of alternative work schedules. In 2009 municipal yearbook (pp. 28-33). Washington, DC: International City-County Management Association Press.
- Fagan, J., & Press, J. 2008. Father influences on employed mothers' work-family balance. *Journal of Family Issues*, 29, 1136-1160.
- Faris, N. 2017. Leadership in an Australian context: Highlighting a qualitative investigation with construct validity support. *The Qualitative Report*, 22(5): 1420–1438.
- Favero, L. W., & Heath, R. G. 2012. Generational perspectives in the workplace: Interpreting the discourses that constitute women's struggle to balance work and life. *The Journal of Business Communication* (1973), 49(4): 332–356 Retrieved from: <https://doi.org/10.1177/0021943612456037> [Accessed: 15 April 2016].
- Fazili, A.I. and Khan, O.F., 2017. A study on the impact of ICT on work life balance. *Life Science Journal*, 14(5): 1-4.
- Fehring, H., & Bessant, J. 2009. Life course research design for traditional labour market research. *J. Edu. Work*, 22(2): 81–90.
- Fernando, N.G., Amaratunga, D. & Haigh, R. 2014. The career advancement of the professional women in the UK construction industry: The career success factors. *Journal of Engineering, Design and Technology*, 12(1): 53-70.
- Ferreira, C.B, de, C. 2015. Feminisms on the web: Lines and forms of action in contemporary feminist debate. *Cadernos Pagu* 44 (Janeiro-Junho):199–228.
- Feyerherm, A., & Vick, Y.H., 2005. Generation X women in high technology: Overcoming gender and generational challenges to succeed in the corporate environment. *Career Development International*, 10(3): 216-227.

- Field, A.P. (2013). *Discovering Statistics using SPSS*. London: Sage Publications.
- Field, A.P. 2009. *Discovering statistics using SPSS for windows: Advanced techniques for all users*. London: Sage Publications Inc.
- Fiksenbaum, L. M. 2014. Supportive work-family environments: Implications for work-family conflict and well-being. *The International Journal of Human Resource Management*, 25, 653-672.
- Fink, A. 2013. *How to conduct surveys. A step-by-step guide*. Los Angeles: Sage Publications Inc.
- Finnemore, M. & Cunningham, P. 1995. Women and the workplace. *Industrial Sociology: A South African Perspective*, 177–210.
- Fischer, J. L., Zvonkovic, A., Juergens, C., Engler, R., & Frederick, H. 2015. Work, family, and well-being at midlife: A person-centered approach. *Journal of Family Issues*, 36(1): 56–86.
- Fleetwood, S. 2007. Why work–life balance now? *The International Journal of Human Resource Management*, 18(3): 387–400. Retrieved from: <https://doi.org/10.1080/09585190601167441> [Accessed: 15 August 2016].
- Flick, U. 2015. *Introducing Research Methodology: A Beginner's Guide to Doing a Research Project*. 2nd ed. London: Sage Publications.
- Fonner, K., & Roloff, M.E. 2012. Testing the Connectivity Paradox: Linking Teleworkers’
- Fraenkel, J., & Wallen, N. 2011. *How to Design and Evaluate Research in Education* (8th Edn). McGraw-Hill Humanities/Social Sciences/Languages.
- Fourie, L., Schurink, W., & Franks, K. 2006. Exploring the social construction of life roles of career-oriented women. *SA Journal of Industrial Psychology*, 32(1), pp.17-24.
- Fransman, E.I. 2015. Determining the impact of flexible work hours on women employed in a higher education institution, Unpublished MBA dissertation, North-West University, Potchefstroom.
- Fraser, C. S. 2017. *Organisational characteristics associated with the implementation of work-life balance policies within South African organisations*. Stellenbosch University, Cape Town.
- Fraser-Moleketi, G. 2008. Minister for Public Service and Administration, Free and Open Source Software and Digital Commons. In *Third Idlelo Conference*. Pretoria.
- Fricker, R.D. 2008. *The handbook of online research methods: Sampling methods for web and e-mail surveys*. London: Sage.
- Fricker, R.D. 2008. *The handbook of online research methods: Sampling methods for web and e-mail surveys*. London: Sage.
- Fried, M. 1998. Taking time: Parental leave policy and corporate culture, Temple

- Friese, S. 2014. *Qualitative data analysis with ATLAS.ti*. London: Sage.
- Fusch, P. I., & Ness, L. R. 2015. Are we there yet? Data saturation in qualitative research. *Qualitative Report*, 20: 1408–1416.
- Gaines, J. 2017. Women in male-dominated careers. *Cornell HR Review*
- Gajendran, R.S., & Harrison, D.A. 2007. The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of applied psychology*, 92(6):1524.
- Galea, C., Houkes, I. & De Rijk, A. 2014. An insider's point of view: How a system of flexible working hours helps employees to strike a proper balance between work and personal life, *The International Journal of Human Resource Management* 25(8): 1090–1111. <https://doi.org/10.1080/09585192.2013.816862>.
- Gallhofer, S. Paisy, C., Roberts, C., & Tarbert, H. 2011. Preferences, constraints and work-lifestyle choices: The case of Scottish female chartered accountants. *Accounting, Auditing & Accountability Journal*, 24 (4): 44-470.
- Ganz, P., Desmond, K., Leedham, Rowland, J., Meyerowitz, B., & Belin. 2003. Quality of life in long-term, disease-free survivors of breast cancer: A follow-up study. *J. Natl. Cancer Inst*, 94: 39–49.
- Gedye, L. 2010. *ICASA slashes interconnection rates*, *Mail & Guardian online*, 15 April 2010. Pretoria. Retrieved from: <http://www.mg.co.za/article/2010-04-15-icasa-slashes-interconnection-rates> [Accessed: 5 June 2017].
- Geldenhuys, J. 2016. The Reinstatement and Compensation Conundrum in South African Labour Law. *Potchefstroomse Elektroniese Regsblad / PELJ* 19. Retrieved from: <https://doi.org/10.17159/1727-3781/2016/v19i0a1172> [Accessed: 11 March 2019].
- Gentles, S., Charles, C., Ploeg, J., & McKibbin, K. 2015. Sampling in Qualitative Research: Insights from an Overview of the Methods Literature. *The Qualitative Report*, 20(11):1772.
- George, C. 2015. Retaining professional workers: what makes them stay? *Employee Relations*, 37(1): 102–121.
- George, D. & Mallery, P. 2003. *SPSS for windows step by step: A simple guide and reference, 11.0 update*, 4th Edition. Boston: Allyn and Bacon.
- George, L. K. 1993. Sociological perspectives on life transitions. *Annual Review of Sociology*, 19(1): 353–373.
- George, M., & Apter, A.J. 2004. Gaining insight into patients' beliefs using qualitative research methodologies. *Current opinion in allergy and clinical immunology*, 4(3): 185-189.
- Ghislieri, C., Emanuel, F., Molino, M., Cortese, C., & Colombo, L. 2017. New technologies

- smart, or harm work-family boundaries management? Gender differences in conflict and enrichment using the JD-R theory. *Frontiers in Psychology*, 8: 1–13. Retrieved from: <https://doi.org/10.3389/psyg.2017-01070> [Accessed: 15 January 2019].
- Giele, J. Z., & Elder, G. H. 1998. *Methods of life course research: Qualitative and quantitative*
- Gillard, H., & Mitev, N. 2006. Women and ICT Training: Inclusion or Segregation in the New Economy? in E. M. Trauth, D. Howcroft, T. Butler, B. Fitzgerald and J.I. DeGross (eds.), IFIP Volume 208, Social Inclusion: Societal and Organisational Implications for Information Systems. Boston: Springer.
- Gillwald, A., Oduduwa, F., & Mothobi, O. 2018. *The state of ICT in Nigeria 2018*.
- Gilson, L.L., Maynard, T.M., Young, N.C.J, Vartiainen, M., & Hakonen, M. 2014. Virtual Teams Research: 10 Years, 10 Themes and 10 Opportunities. *Journal of Management*. DOI: 10.1177/0149206314559946.
- Gilson, L.L., Maynard, T.M., Young, N.C.J, Vartiainen, M., & Hakonen, M. 2014. Virtual Teams Research: 10 Years, 10 Themes and 10 Opportunities. *Journal of Management*. DOI: 10.1177/0149206314559946.
- Golafshani, N. 2015. Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8: 597–606 Retrieved from: <https://www.nova.edu/ssss/QR8-4/golafshani.pdf> [Accessed: 11 March 2019].
- Gombert, L., Rivkin, W., & Kleinsorge, T., 2018. A diary-study on work-related smartphone use and employees' well-being: the moderating role of basic need satisfaction. *Zeitschrift für Arbeitswissenschaft*, 72(2): 111-119
- Gomes, C, & Sorj, B. 2014. Corpo, geracao e identidade: a Marcha das Vadias no Brasil. *Sociedade e Estado* 29(2): 433–442.
- González, A.M., Revelles, B., Almeda, E., Bosch, N.V., & García, J.S. 2016. Women in ICT: Opportunities for Their Inclusion in an International Labor Market. In *IFIP World Information Technology Forum* (pp. 171-177). Springer, Cham.
- Greenberger, E., Goldberg, W. A., Hamill, S., O'Neil, R., & Payne, C. K. 1989. Contributions of a supportive work environment to parents' well-being and orientation to work. *American Journal of Community Psychology*, 17(6): 755–783.
- Greenberger, E., Goldberg, W. A., Hamill, S., O'Neil, R., & Payne, C. K. 1989. Contributions of a supportive work environment to parents' well-being and orientation to work. *American Journal of Community Psychology*, 17(6): 755–783.
- Greenhaus, G.H., & Allen, T.D. 2011. Work-family balance: A review and extension of the literature. In Tetrick L, Quick JC (Eds.), *Handbook of occupational health psychology* (2nd ed., pp. 165–183). Washington, DC: American Psychological Association
- Greenhaus, H. J., & Allen, T. 2012. *Work-family balance: A review and extension of the*

- literature. In J. C., Quick and L. E. Tetrick (Eds.). *Handbook of Occupational Health Psychology* (2nd edition). Washington D.C: American Psychological Association.
- Greenhaus, Jeffrey H, & Beutell, N. J. 1985. Sources of conflict between work and family roles. *Academy of Management Review*, 10(1): 76–88.
- Gregory, A., Milner, S., & Windebank, J. 2013. Work-family and work-life pressures in Australia: advancing gender equality in “good times”? *International Journal of Sociology and Social Policy*.
- Griffiths, M. and Moore, K. 2010. Disappearing Women”: A Study of Women Who Left the UK ICT Sector, *Journal of Technology Management and Innovation*, 5, 1: 95-107.
- Griffiths, M., Keogh, C., Moore, K., Richardson, H., & Tattersall, A. 2006. Inclusion Through the Ages? Gender, ICT Workplaces, and Life Stage Experiences in England’, in E. M. Trauth, D. Howcroft, T. Butler, B. Fitzgerald and J. I. DeGross (eds.) (2006) IFIP Volume 208, *Social Inclusion: Societal and Organisational Implications for Information Systems*. Boston: Springer.
- Grix, J. 2010. *The Foundations of Research*. (2nd ed.). London: Pargrave MacMillan.
- Grobler, P.A., & de Bruyn, A.J. 2011. Flexible work practices (FWP)- An effective instrument in the retention of talent: A survey of selected JSE-listed companies. *South African Journal of Business Management*, 42 (2): 63-78.
- Grossoehme, D.H. 2014. Overview of qualitative research. *Journal of health care chaplaincy*, 20(3): 109-122.
- Grosswald, B. 2003. Shift work and negative work-to-family spillover. *Journal of Sociology and Social Welfare*, 30(4): 31–5.
- Grove, S.K., Burns, N., & Gray, J.R. 2013. *Practice of Nursing Research*. (7th ed). St Louis: Elsevier.
- Grundy, E., & Henretta J. C. 2006. Inter-generational relationships at different ages: An attachment perspective. *Ageing & Society*, 26(5): 707-722.
- Grzywacz, J.G., & Marks, N.F. 2000. Re-conceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111–126.
- Guba, E. G. 1981. Criteria for Assessing the Trustworthiness of Naturalistic. *Educational Communication and Technology*, 29(2): 75–91.
- Guba, E.G., & Lincoln, Y.S., 1994. Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194):105.
- Guba, E.G., 1990. The paradigm dialog. In *Alternative Paradigms Conference, Mar, 1989, Indiana U, School of Education, San Francisco, CA, US*. Sage Publications, Inc.
- Gupta, N. 2015. Rethinking the relationship between gender and technology: A study of the

- Indian example. *Work, employment and society*, 29(4): 661-672.
- Gupta, N. 2015. Rethinking the relationship between gender and technology: A study of the Indian example. *Work, Employment and Society*, 29(4): 661-672.
- Gupta, N., 2012. Women undergraduates in engineering education in India: A study of growing participation. *Gender, Technology and Development*, 16(2):153-176.
- Gurer, D., & Camp, T. 2002. *Investigating the Incredible Shrinking Pipeline for Women in Computer Science, Final Report of the NSF Project*. Retrieved from: <http://women.acm.org/archives/documents/finalreport.pdf> [Accessed: 19 February, 2019]
- Gurney, S. 2010. *Gender, work-life balance and health amongst women and men in administrative, manual and technical jobs in a single organisation: A qualitative study*. Glasgow: University of Glasgow.
- Gurung, L. 2018. The Digital Divide: An Inquiry from Feminist Perspectives. *Dhaulagiri Journal of Sociology and Anthropology*, 12: 50-57.
- Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. 2014. Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behaviour*, 85(3): 361–373. Retrieved from: <https://doi.org/10.1016/j.jvb.2014.08.010> [Accessed: 15 July 2018].
- Haddock, S., Zimmerman, T., Ziemba, S., & Lyness, K. 2006. Practices of dual earner couples successfully balancing work and family. *Journal of Family and Economic Issues*, 27: 207–234.
- Hafkin, N., & Taggart, N. 2001. *Gender, Information Technology, and Developing Countries: An Analytic Study*. Washington, DC: Academy for Educational Development (AED)/ USAID; learnlink.aed.org/Publications/Gender_Book/executive_summary/1gender_forward.html [Accessed: 23 October 2019].
- Hahn, V. C., & Dormann, C. 2013. The role of partners and children for employees' psychological detachment from work and well-being. *Journal of Applied Psychology*, 98(1): 26.
- Hair, J.F., Balck, W.C., Babin, B.J., & Anderson, R.E. 2010. *Multivariate Data Analysis* (7th ed). Upper Saddle River, N.J: Prentice Hall.
- Hair, J.F., Black, W.C., Babin, J.B., Anderson, R.E. & Tatham, R.L. 2006. *Multivariate Data Analysis*. 6th Edition. Upper Saddle River: Pearson Prentice Hall.
- Hale, J. C. I. 2013. *Differences in life satisfaction among graduate students from online and traditional universities (Doctoral thesis)*. Walden University, Minnesota.
- Hall, N., & Quinn, R. 2014. *Parental Involvement at the High School Level: Parents'*

- Perspectives. *Journal of Ethnic and Cultural Studies*, 1(1): 13–21.
- Hammarberg, K., Kirkman, S. & De Lacey, S. 2016. Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, 31(3): 498-501.
- Hammer, L.B, Kossek, E., Yragui, N., Bodner, T., & Hanson, G. 2009. Development and validation of a multidimensional measure of Family Supportive Supervisor Behaviours (FSSB). *J Manage*, 35(4): 837–856.
- Hart, J. 2016. Dissecting a gendered organisation: Implications for career trajectories for mid-career faculty women in STEM. *The Journal of Higher Education*, 87(5): 605–634. doi:10.1080/00221546.2016.11777416.
- Hartmann, H. (2010). Capitalism, patriarchy and job segregation by sex. In J. Goodman (Ed.). *Global perspectives on gender and work: Readings and interpretations* (p. 54-62). Plymouth: Rowman & Littlefield Publishers Inc.
- Hartmann, H. 2010. Capitalism, patriarchy and job segregation by sex. In J. Goodman (Ed.), *Global perspectives on gender and work: Readings and interpretations*, (pp. 54–62). Plymouth: Rowman & Littlefield Publishers Inc. PMid:20189258.
- Haslam, D. M., Patrick, P., & Kirby, J. N. 2015. Giving voice to working mothers: A consumer informed study to program design for working mothers. *Journal of Child and Family Studies*, 24(8): 2463–2473.
- Haustein, S., Klockner, C., & Blobaum, A. 2009. Car use of young adults: The role of travel socialisation. *Transp. Res*, 12: 168–178.
- Haveman, H., & Beresford, L. 2011. If you're so smart, why aren't you the boss? Explaining the persistent vertical gender gap in management. *The ANNALS of the American Academy of Political and Social Science*, 114–128.
- Heale, R. & Twycross, A. 2015. Validity and reliability in quantitative studies. *Evidence Based Nursing*, 18(3): 66-67.
- Heinz, W., Huinink, J., Swader, C., & Weymann, A. 2009. *General Introduction.*” Pp. 15 – 30 in *The Life Course Reader: Individuals and Societies Across Time*, edited by Walter R. Heinz, Johannes Hunnink, Christopher S. Swader, and Ansgar Weymann. New York: Campus Verlag
- Hennink, M., Hutter, I., & Bailey, A. 2011. *Qualitative research methods*. Los Angeles: SAGE Publications Ltd.
- Herman, C, & Lewis, S. 2012. Entitled to a sustainable career? Motherhood in science, engineering and technology. *Journal of Social Issues*, 68(4): 767–789.
- Herman, C. 2015. Rebooting and Rerouting: Women's Articulations of Frayed Careers in Science, Engineering and Technology Professions. *Gender, Work & Organisation*, 22(4): 324–338.

- Herman, C., & Lewis, S. 2012. Entitled to a sustainable career? Motherhood in science, engineering and technology. *Journal of Social Issues*, 68(4): 767–789.
- Herman, C., & Webster, J., 2010. Taking a lifecycle approach: redefining women returners to science, engineering and technology. *International Journal of Gender, Science and Technology*, 2(2).
- Hicks, J. 2012. Opinion piece: gender transformation in the workplace. Commission for Gender Equality. Retrieved from: www.cge.org.za [Accessed: 6 February 2016].
- Hobson, B., Fahlén, S., & Takács, J. 2011. Agency and capabilities to achieve a work–life balance: A comparison of Sweden and Hungary. *Social Politics*, 18(2): 168–198.
- Hochschild, A. 1989. *The Second Shift*. New York: Avon Books.
- Hochschild, A. R., & Machung, A. 2003. *The second shift*. London: Penguin Books.
- Hoeven, C. L., & Zoonen, W. 2015. Flexible work designs and employee well-being: Examining the effects of resources and demands. *New Technology, Work and Employment*, 30(3): 237–255.
- Hoffman, M. F., & Cowan, R. L. 2010. "Be Careful What You Ask For: Structuration
- Hoobler, J.M, Lemmon, G., & Wayne, S. J. 2011. Women's underrepresentation in upper management: New insights on a persistent problem. *Organisational Dynamics*, 40(3): 151–156.
- Hook, J. L. 2006. Care in context: Men's unpaid work in 20 countries, 1965–2003. *American Sociological Review*, 71(4): 639–660.
- Horwitz, F.M., & Jain, H. 2011. An assessment of employment equity and broad based black economic empowerment developments in South Africa. *Equality, Diversity and Inclusion: An International Journal*.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. 2013. Rigour in qualitative case study research. *Nurse Researcher*, 20(4): 12–17. <https://doi.org/10.7748/nr2013.03.20.4.12.e326>.
- Huyer, S. 2015. Is the gender gap narrowing in science and engineering? *UNESCO science report: towards 2030*. 85–103.
- Ireson, R., Sethi, B., & Williams, A. 2018. Availability of caregiver-friendly workplace policies (CFWP s): an international scoping review. *Health & Social Care in the Community*, 26(1): e1–e14. Retrieved from: <https://doi.org/doi: http://dx.doi.org/10.1111/hsc.12347> [Accessed: 19 January 2019].
- Iverson, S. V. 2011. Glass ceilings and sticky floors: Women and advancement in higher education. *Women as Leaders in Education: Succeeding despite Inequity, Discrimination, and Other Challenges*, 1: 79–105.
- Jacobs, A.A. 2017. The effects of flexible work arrangements and childfree-friendly culture on

- organisational commitment (*Master's thesis*). University of Cape Town.
- Jacobs, J., & Gerson, K. 2004. *The time divide work, family, and gender inequality*. MA: Harvard University Press.
- Jacobs, P., & Schain, S. 2009. Professional Women: The Continuing Struggle for Acceptance and Equality. *Journal of Academic Business Ethics*, 98–111.
- James, T., Smith, R., Roodt, J., Primo, N., & Evans, N. 2006. Women in the information and communication technology sector in South Africa. Retrieved from: <http://Women-Inflict.Meraka.csir.co.za> [Accessed: 18 May 2017].
- Jamison, M., Sanford, B., & Liangliang, J. 2009. *Analyzing Telecommunications Market Competition: A Comparison of Cases*. Public Utility Research Center, University of Florida.
- Jang, S. J., Park, R., & Zippay, A. 2011. The interaction effects of scheduling control and work-life balance programs on job satisfaction and mental health. *International Journal of Social Welfare*, 20(2): 135–143.
- Jang, S.J., & Zippay, A. 2011. The Juggling Act: Managing work-life conflict and work-life balance. *The Journal of Contemporary Social Services*, 84-90.
- Jayawarna, D., Rouse, J., & Kitching, J. 2013. Entrepreneur motivations and life course. *International Small Business Journal*, 31(1): 34–56.
- Jennings, J, & McDougald, M. 2012. Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice. *Academy of Management Review*, 32(2), 747–757.
- Jensen, C. C. 2013. *Native American women leaders' use of information and communication technologies (ICTs) for work-life balance (WLB) and capacity building (Unpublished doctoral thesis)*. Malibu, California: Pepperdine University.
- Johns, T & Gratton, L. 2013. The Third Wave of Virtual Work. *Harvard Business Review*. Jan-Feb, 66-73.
- Jones, F., Burke, R. J., & Westman, M. 2013. *Work-life balance: A psychological perspective*. New York: Psychology Press.
- Jones, H. 2013. *Understanding walking and cycling using a life course perspective (Unpublished Doctoral Thesis)*. University of the West of England., London. Retrieved from: <http://eprints.uwe.ac.uk/22172> [Accessed: 15 June 2017].
- Jones, S. J., & Taylor, C. M. 2013. Work and life balance support of female midlevel non-instructional staff at community colleges. *Community College Journal of Research and Practice*, 37(12): 936–953.
- Julka, T., & Mathur, U. 2017. A conceptual study of Work-Life Balance among Women Employees. *International Journal of Emerging Research in Management &*

- Technology*, 6(2):74-78.
- Kabat-Farr, D., & Cortina, L. M. 2014. Sex-based harassment in employment: New insights into gender and context. *Law and Human Behaviour*, 38: 58–73. doi:10.1037/lhb0000045.
- Kallemeyn, L. M., Hall, J., Friche, N., & McReynolds, C. 2015. Cross-continental reflections on evaluation practice: Methods, use, and valuing. *American Journal of Evaluation*, 36: 339–357. <https://doi.org/10.1177/1098214015576400>.
- Kaur, K. 2015. Telecommunication development, digital divide and economic growth in India. (*Unpublished Doctoral thesis*). Guru Nanak Dev University.
- Kaya, B., & Karatepe, O.M. 2020. Attitudinal and behavioural outcomes of work–life balance among hotel employees: the mediating role of psychological contract breach, *Journal of Hospitality and Tourism Management*, 42: 199-209.
- Keene, J. R., & Reynolds, J. R. 2005. The job costs of family demands: Gender differences in negative family-to-work spillover. *Journal of Family Issues*, 26: 275–299.
- Kelliher, F. 2011. Interpretivism and the pursuit of research legitimisation: an integrated approach to single case design. *Leading Issues in Business Research Methods*, 1(45).
- Kemparaj, U., & Chavan, S. 2013. Qualitative research: A brief description. *Indian Journal of Medical Sciences*, 67: 89–98. <https://doi.org/10.4103/0019-5359.121127>.
- Kern, S.E. 2013. Inferential statistics, power estimates, and study design formalities continue to suppress biomedical innovation. Retrieved from: <https://arxiv.org/pdf/1411.0919>. [Accessed: 1 April 2020].
- Khalid, K., Hilman, H. & Kumar, D. 2012. Get along with Qualitative research process. *International Journal of Research in Management*, 2(2): 15-29.
- Khurshid, A. 2015. Islamic Traditions of Modernity: Gender, Class, and Islam in a Transnational Women’s Education Project. *Gender & Society*, 29, 1, 98-121.
- Kiamba, J. M. 2008. Women and Leadership Positions: Social and Cultural Barriers to Success. *Wagadu*, 6(1): 1–16.
- Kim, J., & Wiggins, M. E. 2011. Family-friendly human resource policy: Is it still working in the public sector? *Public Administration Review*, 71, 728-739.
- Kline, R.B. 2016. *Methodology in the social sciences*. Principles and practice of structural equation modelling (4th ed). Guilford Press.
- Kneale, L. 2017. *The information technology industry*. Randburg. WHO Owns Whom (PTY) LTD.
- Ko, J., Hur, S. U., & Smith-Walter, A. 2013. Family-friendly work practices and job satisfaction and organisational performance: Moderating effects of managerial

- support and performance-oriented management. *Public Personnel Management*, 42, 545-565.
- Koekemoer, E., & Mostert, K. 2010. Work-nonwork interference: preliminary results on the psychometric properties of a new instrument: original research. *SA Journal of Industrial Psychology*, 36(1): 1–13. Retrieved from: <https://journals.co.za/content/psyc/36/1/EJC89196> [Accessed: 14 March 2017].
- Kohan-Mass, J., Dakwar, J., & Dadush, V. 2018. Israel's Arab sector high schools: An island of gender dominance in STEM subjects. *Gifted Education International* (Online). doi: 10.1177/0261429417754205. Retrieved from https://www.researchgate.net/publication/322947497_Israel's_Arab_sector_high [Accessed: 19 September 2020].
- Kornbluh, M. 2015. Combatting challenges to establishing trustworthiness in qualitative research. *Qualitative Research in Psychology*, 12: 397–414. <https://doi.org/10.1080/14780887.2015.102194>.
- Kossek, E., Lewis, S. & Hammer, L. B. 2010. Work—life initiatives and organisational change: Overcoming mixed messages to move from the margin to the mainstream', *Human Relations*, 63(1): 3–19.
- Kossek, E.E, Valcour, M., & Lirio, P. 2014. *The Sustainable Workforce: Organisational Strategies for Promoting Work-Life Balance and Well-Being*. In C. Cooper & P. Chen (Eds.), *Work and Wellbeing*. Oxford, UK: Wiley-Blackwell.
- Kossek, E.E., Pichler, S., Bodner, T., & Hammer, L. B. 2011. Workplace social support and work–family conflict: A meta-analysis clarifying the influence of general and work–family-specific supervisor and organisational support. *Personnel Psychology*, 64(2): 289–313. Retrieved from: <https://doi.org/10.1111/j.1744-6570.2011.01211.x> [Accessed: 23 July 2018].
- Kotecha, K., Ukpere, W., & Geldenhuys, M. 2014. Technology and Work-Life Conflict of Academics in a South African Higher Education Institution. *Mediterranean Journal of Social Sciences*, 5(2): 629–641.
- Krecker, M. L. 1994. Work careers and organisational careers: The effects of age and tenure on worker attachment to the employment relationship. *Work and Occupations*, 21(3): 251–283.
- Krosnick, J.A. & Presser, S. 2010. *Question and questionnaire design. Handbook of Survey Research*, 2nd Edition. United Kingdom: Emerald Group Publishing Limited.
- Krymis, E. 2012. *Women and work-life balance: A phenomenological qualitative analysis of identity, relational style, adaptive style, and drive and motivation, and the role of faith from the narrative life-story framework*. Pepperdine University. Retrieved

- from: <http://pqdtopen.proquest.com/#viewpdf?dispub=3481267> [Accessed: 19 July 2017].
- Kshirsagar, S.V., & Kadam, S.A. 2014. Impact of Shift Timings and Income on Work Life Balance of Employees in Shipping Organisation. *International Journal of Science and Research*, 522-525.
- Kulich, C., Trojanowski, G., Ryan, M. K., Haslam, S. A., & Renneboog, L. D. R. 2011. Who Gets the Carrot and Who Gets the Stick? Evidence of Gender Disparities in Executive Remuneration. *Strategic Management Journal*, 32: 301–321.
- Kumari, D. G. S. 2019. Managing Work-Family Boundary - The Link between Work-Life Benefits and Organisational Citizenship. *International Journal of Advanced Science and Technology*, 28(16), 1610 -. Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/2149>. [Accessed 14 October 2020].
- Kumari, T.K., & Devi, R.V. 2015. A Study on Work–Life Balance of Women Employees in Selected Service Sectors, *Pacific Business Review International*, 7(10): 17-23.
- Kumarasamy, M. M., Pangil, F., & Isa, M. F. 2016. The effect of emotional intelligence on police officers’ work–life balance: The moderating role of organisational support. *International Journal of Police Science & Management*, 18(3): 184-194.
- Kuntjara, E. 2002. Gender issues in information technology communication. 1998–2002 Isis International-Manila. Retrieved from: www.isiswomen.org .[Accessed: 17 February, 2019].
- Lagerberg, F. *Women in business: the path to leadership*. 2015. Retrieved from: <http://www.grantthornton.global/en/insights/articles/women-in-business-2015/> [Accessed: 4 December 2019].
- Lambert, C., Kass, S., Piotrowski, C., & Vodanovich, S. 2006. Impact factors on work-family balance: initial support for border theory. *Organisational Development Journal*, 24: 64–75.
- Lareau, A. 2002. Invisible Inequality: Social Class and Childrearing in Black Families and White Families. *American Sociological Review*, 67: 747-776.
- Larsen, R. & Warne, R.T. 2010. Estimating confidence intervals for eigenvalues in exploratory factor analysis. *Behaviour Research Methods*, 42(3): 871-876.
- Larsen, R. & Warne, R.T. 2010. Estimating confidence intervals for eigenvalues in exploratory factor analysis. *Behaviour Research Methods*, 42(3): 871-876.
- Lauzun, H. M., Morganson, V. J., Major, D. A., & Green, A. P. 2010. Seeking work-life balance: Employees’ requests, supervisors’ responses, and organisational barriers. *The Psychologist-Manager Journal*, 13(3): 184–205. Retrieved from:

- <https://doi.org/10.1080/10887156.2010.500953> [Accessed: 12 February 2017].
- Le Cordeur, M. 2014. *Demand for IT leadership in men's club*. [Online]. Retrieved from: <http://www.fin24.com/Tech/News/Demand-for-IT-leadership-in-mens-club-20140715> [Accessed 20 May 2020].
- Leaper, C., & Brown, C. S. 2008. Perceived experiences with sexism among adolescent girls. *Perceived Experiences with Sexism among Adolescent Girls*, 79(3): 685–704. <https://doi.org/10.1111/j.1467-8624.2008.01151.x>.
- Lee, G., & Steele, C. 2009. Boundary management of employees' non - work lives: Effects on South African workers' commitment. *South African Journal of Economic and Management Sciences*, 12(1): 63–80.
- Leena, D., & Sudhir, D. 2013. Work-Life Balance by Women Faculty Members: The Conundrum Within, 8: 55–67.
- Leonard, R., & Cairnes, M. 2019. *Changing work realities: Creating socially and environmentally responsible workplaces*. Leiden: Brill Sense.
- Leung, L. 2015. Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4: 324–327.
- Leung, L., & Zhang, R. 2017. Mapping ICT use at home and telecommuting practices: A perspective from work/family border theory. *Telematics and Informatics*, 34(1): 385–396.
- Lever, J., Krzywinski, M., & Altman, N. 2017. Points of significance: Principal component analysis.
- Lewis, S., Anderson, D., Lyonette, C., Payne, N., & Wood, S. 2017. Public sector austerity cuts in Britain and the changing discourse of work–life balance. *Work, Employment and Society*, 31(4): 586–604. Retrieved from: <https://doi.org/10.1177/0950017016638994> [12 August 2018].
- Lewis, S., Izraeli, D., & Hootsmans, H. 1992. *Dual Earner Families: Cross National Perspectives*. London: Sage.
- Lewis-Enright, K., Crafford, A., & Crous, F. 2009. Towards a workplace conducive to the career advancement of women. *SA Journal of Industrial Psychology*, 35(1): 136–144. Retrieved from: <http://dx.doi.org/10.4102/sajip.v35i1.832> [Accessed: 13 October 2018].
- Li, K.-K., Cardinal, B. J., & Settersten, R. A. 2009. A life-course perspective on physical activity promotion: applications and implications. *Quest*, 61(3): 336–352.
- Lincoln, Y. S., & Guba, E. G. 1985. *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications, Inc.

- Lörz, M., & Mühleck, K. 2019. Gender differences in higher education from a life course perspective: transitions and social inequality between enrolment and first post-doc position. *Higher Education*, 77(3): 381-402.
- Louw-Harmse, S.Y. 2015. *Gender imbalance: A focus on senior management positions in the IT sector in South Africa*. (Unpublished Master's thesis). Cape Peninsula University of Technology. Cape Town.
- Lynn, S. A., Cao, L. T., & Horn, B. C. 1996. The influence of career stage on the work attitudes of male and female accounting professionals. *Journal of Organisational Behaviour*, 17(2): 135–149.
- Lyons, S., Sweitzer, L., & Ng, E. 2009. The shifting nature of careers in Canada: A framework for research, ASAC, Niagra Falls, Ontario.
- Mackenzie, C. R. 2014. It is hard for mums to put themselves first: how mothers diagnosed with breast cancer manage the sociological boundaries between paid work, family and caring for the self. *Social Science & Medicine*, 117: 96-106.
- Maharaj, A. 2014. Expatriate Academics and Expatriate Management in a South African Higher Education Institution (*Doctoral dissertation*), University of Kwa-Zulu Natal, South Africa.
- Mahasha, K. L. 2016. *Balancing work and family responsibilities: The case of women in management positions in Nkangala District (Masters' Dissertation)*. University of the Witwatersrand.
- Maji, S. 2019. "Doing Men's Jobs". A commentary on work-life balance issues among women in engineering and technology. *Metamorphosis*, 18 (1): 68-75.
- Malhotra, N. K. 2010. Marketing Research. An Applied Orientation (6th edition). New Jersey: Pearson.
- Malone, E. K., Issa, R. R., & ASCE, F. 2013. Work-Life balance and organisational commitment of women in the U.S construction industry. *Journal of Professional Issues of Engineering Education and Practices*, 139(2): 87–90.
- Malone, K. 2011. *Mother's perceptions of work-family conflict and the relationship to positive parenting, and parental satisfaction (Graduate Theses and Dissertations)*. Iowa State University, Ames, Iowa.
- Managa, A. R. 2013. Juggling Work and Life: Experience of Women in Academic and Research Institutes in South Africa. *New Voices in Psychology*, 9(1 & 2): 16–31.
- Mani, V. 2013. Work life balance and women professionals. *Global Journal of Management and Business Research*.

- Marafi, A.N.H.A.D. 2016. Work-life balance approaches among educated working married mothers in Egypt (*Master's thesis*). The American University in Cairo School of Global Affairs and Public Policy.
- Maree, K., Creswell, J.W., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Niewenhuis, J., Pietersen, J., Plano-Clark, V.L. & Van der Westhuizen, C. 2007. *First Steps in Research*. Pretoria: Van Schaik Publishers.
- Marshall, B., Cardon, P., Podar, A., & Fontenot, R. 2013. Does sample size matter in qualitative research? A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1): 11–22.
- Marshall, C., & Rossman, G. 2016. *Designing Qualitative Research* (3rd. ed.). Thousand Oaks, CA: Sage.
- Martin, J. 2018. Research Methods in Education 8th edition edited by Louis Cohen, Lawrence Manion and Keith Morrison. In *Research Methods in Education* (323-333). Routledge.
- Martin, P., & Barnard, A. 2013. The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 39(2), Art. #1099, 12 pages.
- Martinez, M, Lago, C, Souza, C., & Lago, M.C. 2016. Estudos de genero na pesquisa em jornalismo no Brasil: uma tenue relacao. *Revista Famecos* 23(2): 1–23.
- Masika, R & Bailur, S. 2015. Negotiating women's agency through ICTs: A comparative study of Uganda and India. *Gender, Technology and Development*. 19(1): 43-69.
- Mason, M. 2010. Sample size and saturation in Ph.D. studies using qualitative interviews. *Forum Qualitative Sozialforschung/Forum. Qualitative Social Research*, 11(3).
- Masuda, A., & Visio, M. 2012. *Nepotism practices and the work-family interface*. In R. G. Jones (Ed.), *Nepotism in organisations*. New York: Routledge/Taylor & Francis Group.
- Mathers, N, Fox, N. & Hunn, A. 2009. *Surveys and questionnaires*. National Institute for Health Research (RDS). Retrieved from: http://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/12_Surveys_and_Questionnaires_Revision_2009.pdf. [Accessed: 1 April 2020].
- Mathur-Helm, B. 2006. Women and the glass ceiling in South African banks: An illusion or reality? *Women in Management Review*, 21(4): 311–326.
- Matos, C. 2017. *Globalization, Gender Politics and the Media*. Lanham, MD: Lexington Books.
- Matos, K., & Galinsky, E. 2011. *Workplace flexibility in the U.S.: A status report*. Retrieved from http://whenworkworks.org/research/downloads/www_us_workflex.pdf [Accessed: 3 June 2020].

- Maume, D. J. 2006. Gender Differences in Restricting Work Efforts Because of Family Responsibilities. *Journal of Marriage and Family*, 68: 859-869.
- Mazmanian, M., Orlikowski W.J., & Yates J. 2013. The Autonomy Paradox. The Implications of Mobile Devices for Knowledge Professionals. *Organisation Science* 24 (5): 1337–1357.
- McBride, D.E. & Parry, J.A., 2016. *Women's rights in the USA: Policy debates and gender roles*. London: Routledge, Taylor & Francis Group.
- McDonald, P., Brown, K., & Bradley, L. 2005. Explanations for the provision-utilisation gap in work-life policy. *Women in Management Review*.
- McGregor, J. 2013. Single, childless and want work-life balance? How taboo. *The Washington Post*.
- McQuarrie, F. A. 2010. The struggle over worker leisure: an analysis of the history of the workers' sports association in Canada. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences De l'Administration*, 27 : 391–402. Retrieved from: <https://doi.org/10.1002/cjas.156> [Accessed: 12 May 2017].
- Meela. J.M. 2018. Towards a theoretical framework for female, it professionals' advancement to it executive positions: A South African perspective (*Doctoral dissertation*). University of Pretoria. Pretoria.
- Mennino, S. F., Rubin, B. A., & Brayfield, A. 2005. Home-to-job and job-to-home spillover: The impact of company policies and workplace culture. *Sociological Quarterly*, 46: 107–135. doi:10.1111/j.1533-8525.2005.00006.x
- Merriam-Webster online Dictionary and Thesaurus. 2016. Work. Retrieved from: <http://www.merriam-webster.com/dictionary/work> . [Accessed: 14 May 2016].
- Meyer, T. 2014. Are Women Moving Forward in the South African Public Service? *Journal of Public Administration*, 49(4): 1046–1059.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. 2011. Antecedents of work–family conflict: A meta-analytic review. *Journal of Organisational Behaviour*, 32(5): 689–725. Retrieved from: <https://doi.org/10.1002/job.695> [Accessed: 19 January 2017].
- Mieczakowski, A., Goldhaber, T., & Clarkson, J. 2010. *Culture, communication and change: Summary of an investigation of the use and impact of modern media and technology in our lives*. Cambridge: Engineering Design Centre.
- Milkie, M. A. & Peltola, P. 1999. Playing All the Roles: Gender the Work-Family Balancing Act. *Journal of Marriage and the Family*, 61(2): 476-490.
- Milkie, M., Bierman, A., & Schieman, S. 2008. How adult children influence older parents' mentalhealth: Integrating stress-process and life-course perspectives. *Social*

- Psychology Quarterly*, 71: 86 – 105.
- Ministerio de Educación Cultura y Deporte. 2019. *Datos y cifras del Sistema universitario español*. Madrid: Secretaría General Técnica.
- Moen, K., & Middelthon, A. I. 2015. *Qualitative Research Methods*: Elsevier Ltd.
- Moen, P, Kelly, E., & Huang, R. 2008. Fit inside the work-family black box: An ecology of the life course, cycles of control reframing. *Journal of Occupational and Organisational Psychology*, 81(3): 411–433.
- Moen, P. 1995. A life course approach to postretirement roles and well-being. *Promoting Successful and Productive Aging*, 239–256.
- Moen, P. 2010. *From “work-family” to the “gendered life course” and “fit”: five challenges to the field*, 2010–501.
- Moen, P., & Yu, Y. 2000. Effective work/life strategies: Working couples, work conditions, gender and life quality. *Journal of Social Problems*, 47(16): 291–326.
- Moen, P., Dempster-McClain, D., & Williams Jr, R. M. 1992. Successful aging: A life-course perspective on women’s multiple roles and health. *American Journal of Sociology*, 97(6): 1612–1638.
- Mohanty, A., & Jena, L. K. 2016. Work-Life Balance Challenges for Indian Employees: Socio-Cultural Implications and Strategies. *Journal of Human Resource and Sustainability Studies*, 4(01): 15. Retrieved from: <http://dx.doi.org/10.4236/jhrss.2016.41002> [Accessed: 8 May 2017].
- Mohsan, F., Nawaz, M. M., Khan, M. S., Shaukat, Z., & Aslam, N. 2011. Are employee motivation, commitment and job involvement inter-related: Evidence from banking sector of Pakistan. *International Journal of Business and Social Science*, 2(17).
- Mokomane, Z., Masson, F., & Ross, E. 2014. Workplace changes and its implications for Work–Family conflict and gender asymmetries in South Africa. In *Work–Family Interface in Sub-Saharan Africa*. (pp:135–146). Springer.
- Mokotong, R.D. 2016. The coping mechanisms of women in the mining industry. (*Submitted masters’ thesis*). Pretoria. University of Pretoria.
- Molefe, J., & Sehularo, L. A. 2015. Nurses’ perceptions on factors contributing to job dissatisfaction in a public psychiatric hospital in North West Province, South Africa. *African Journal for Physical, Health Education, Recreation & Dance*, 21: 472–483.
- Moorhead, G., & Griffin, R. 2010. *Organisational Behaviour: Managing People and Organisations* (9th ed.). South-Western: Cengage Learning.
- Moosa, R. 2017. *Exploring work-life balance amongst female flight attendants at selected airlines in the Western Cape, Unpublished Masters’ dissertation*. University of the Western Cape, Cape Town.

- Morgan, G.A & Harmon, R.J. 2001. Data collection techniques. Retrieved from: www.ncbi.nlm.nih.gov/pubmed/11501698. [Accessed: 1 April 2020].
- Morgan, S. 2012. Women's ICT Sector Employment in Developing Countries: Dualism of Rhetoric vs Reality in the Case of Sri Lanka. Paper Number 49. Available at <http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/index.htm> [Accessed 31 October, 2020].
- Morganson, V. J., Litano, M. L., & O'Neill, S. K. 2014. Promoting work–family balance through positive psychology: A practical review of the literature. *The Psychologist-Manager Journal*, 17(4): 221. Retrieved from: <https://doi.org/10.1037/mgr0000023> [23 November, 2017].
- Morikawa, M. 2017. Firms' expectations about the Impact of AI and robotics: Evidence from a survey. *Economic Inquiry*, 55(2): 1054–1063.
- Morrissey, C. S., & Schmidt, M. L. 2008. Fixing the system, not the women: An innovative approach to faculty advancement. *Journal of Women's Health*, 17(8): 1399–1408. Retrieved from: <https://doi.org/10.1089/jwh.2007.0708> [22 February 2017].
- Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. 2012. Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences*, 109(41): 16474–16479. <https://doi.org/10.1073/pnas.1211286109>
- Mostert, K. 2009. The balance between work and home: The relationship between work and home demands and ill health of employed females. *SA Journal of Industrial Psychology*, 35(1): 145–152. Retrieved from: <http://dx.doi.org/sajip.v35i1.743> [4 May 2017].
- Mpofu, I., 2014. Effective marketing strategies for township schools in the Gauteng Province (Doctoral dissertation) University of South Africa.
- Msabaa, B. 2017. *Effect of perceived Work-Life Balance on employee turnover intent among international humanitarian organisations in Kenya*. University of Nairobi, Nairobi, Kenya.
- Mugera, W. 2013. *Non-probability sampling techniques*. *Research Methods*. Retrieved from: https://learning.uonbi.ac.ke/courses/LDP603/work/assig_2/Nonprobability_sampling_techniques_assignment_1.pdf. [Accessed: 13 January 2019].
- Muller-Heyndyk, R. 2019. Women more likely to take career break for caring responsibilities. Retrieved from <https://www.hr magazine.co.uk/article-details/Women-more-likely-to-take-career-break-for-caring-responsibilities> [Accessed 30 October 2020].

- Mullet, D. R., Rinn, A. N., & Kettler, T. 2017. Catalysts of women's talent development in STEM: A systematic review. *Journal of Advanced Academics*, 28(4), 253-289. doi:10.1177/1932202X17735305
- Muna, F. A., & Mansour, N. 2009. Balancing work and personal life: The leader as acrobat. *Journal of Management Development*, 28(2): 121–133. Retrieved from: <https://doi.org/10.1177/1523422313498567> [Accessed: 19 March 2017].
- Mungania, A. 2017. *Influence of work-life balance practices on performance of the banking industry in Kenya (Unpublished Thesis)*. Jomo Kenyatta University of Agriculture and Technology, Nairobi.
- Munn, S. L., Rocco, T. S., Bowman, L., & van Loo, J. B. 2011. Work-life research and the representation of sexual minorities. In *7th International Critical Conference, Naples, Italy*.
- Murphy, F. & Doherty, L. 2011. The experience of work life balance for Irish senior managers. *Equality, Diversity and Inclusion: An International Journal*.
- Mušura, A., Koričan, M., & Krajnović, S. 2013. Work-life and life-work conflicting Croatian companies: Some perspectives. *International Journal of Organisation Theory & Behaviour*, 16(1): 42–67.
- Muteswa, R., & Ortlepp, K. 2011. Contributing factors to potential turnover in a sample of South African management-level employees. *Acta Commercii*, 11(1): 13–29.
- Muthukumar, M., Savitha, R., & Kannadas, P. 2014. Work LIFE Balance. *Global Journal of Finance and Management*, 6(9), 827–832.
- MyBroadband. 2014. These are the companies who control the Internet in South Africa. Retrieved from <https://mybroadband.co.za/news/> [Accessed: 26 April 2017].
- Mybroadband. 2018. Internet penetration in South Africa. My Broadband, February 9. Retrieved from: <https://mybroadband.co.za/news/broadband/247702-internet-penetration-in-south-africa.html> [Accessed: 4 January 2019].
- MyBroadband. 2020. The Telkom story – From a dominant monopoly to begging for help. Retrieved from <https://mybroadband.co.za/news/business-telecoms/338008-the-telkom-story-from-a-dominant-monopoloy-to-begging-for-help.html> [Accessed: 26 March 2020].
- Naithani, D., & Jha, A. 2009. An empirical study of work and family life spheres and emergence of work-life balance initiatives under uncertain economic scenario.
- Naithani, P. 2010. Recession and work-life balance initiatives. *Romanian Economic Journal*, 13: 55-68.

- Naldini, M., Pavolini, E., & Solera, C., 2016. Female employment and elderly care: The role of care policies and culture in 21 European countries. *Work, employment and society*, 30(4): 607-630.
- Nam, T. 2014. Technology Use and Work-Life Balance. *Applied Research Quality Life*, 9: 1017–1040.
- Nanda, A. 2015. Work life conflict: The spillover effect. *International Journal of Research in Management & Business Studies*, 2: 56-62.
- Natansohn, G. 2013. Introducao: o que tem a ver as tecnologias digitais com o genero? In: Natansohn, G (ed.) *Internet em codigo feminino: teorias e practicas*, Vol. 1 (E-book). Buenos Aires : La Crujia.
- National Bureau of Statistics (NBS). 2018. *Annual GDP tables, 2014–17*. Abuja, Nigeria.
- Ndung'u, N.M., Lewis, C., & Mothobi, O. 2019. The state of ICT in Kenya
- Neal, M. B., & Hammer, L. B. 2017. *Working Couples Caring for Children and Aging Parents: Effects on Work and Well-Being*. Psychology Press. Retrieved from: <https://doi.org/10.4324/9781315083865> [2 February 2019].
- Neelam, Y. 2014. Comparison of the work-life balance of women employees in educational field degree college permanent employees and I.T Industries, 36: 42.
- Nekoranec, J. 2013. Management and organisational behaviour. Some basic aspects. *Journal of Defense Resources Management*, 4(1): 93. Retrieved from: <http://journal.dresmara.ro> [Accessed 13 September 2017].
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. 1996. Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, 81(4): 400.
- Neuman, W. L. 2011. *Social research methods: Qualitative and Quantitative Approaches*. 7th Ed. London: Pearson.
- Neuman, W.L. 2014. *Social Research Methods: Qualitative and Quantitative Approaches*. 7th ed. Harlow: Pearson Education Limited.
- Newman, B. M., & Newman, P. R. 2010. *Theories of human development*. New Jersey: Lawrence Publishers Psychology Press.
- Nicklin, J.M., Seguin, K., & Flaherty, S. 2019. Positive work–life outcomes: exploring self-compassion and balance, *European Journal of Applied Positive Psychology*, 3(6): 2397-7116.
- Nilsen, W., Skipstein, A., & Demerouti, E. 2016. "Adverse trajectories of mental health problems predict subsequent burnout and work-family conflict - a longitudinal study of employed women with children followed over 18 years." *BMC Psychiatry*. 16(1):384.

- Nishimura, A., Carey, J., Erwin, P. J., Tilburt, J. C., Murad, M. H., & McCormick, J. B. 2013. Improving understanding in the research informed consent process: A systematic review of 54 interventions tested in randomized control trials. *BMC Medical Ethics*, 14, 1–15. <https://doi.org/10.1186/1472-6939-14-28>.
- Njoki, M.M., Wabwoba, F., & Micheni, E.M. 2016. ICT definition implication on ICT career choice and exclusion among women. *International Journal of Information Technology and Computer Science*, 5, 62-71.
- Noble, H., & Smith, J. 2015. Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18: 34–35. <https://doi.org/10.1136/eb-2015-102054>.
- Nunnally, Jum C. 1967. *Psychometric Theory*, New York: McGraw-Hill.
- Nwagbara, U., & Akanji, B. O. 2012. The impact of work-life balance on the commitment and motivation of Nigerian women employees. *International Journal of Academic Research in Business and Social Sciences*, 2(3): 38.
- O’Neil, D. A., Hopkins, M. M., & Bilimoria, D. 2008. Women’s careers at the start of the 21st century: Patterns and paradoxes. *Journal of Business Ethics*, 80(4): 727–743.
- Ojha, M. 2011. *Job demands, social support, and work-family conflict: a comparative study of immigrant and native workers in the United States. (Unpublished doctor’s thesis)*. University of Kentucky, Lexington, Kentucky.
- Ojokoh, B. A. 2010. Empowering Nigerian Women Using IT: Practical Strategies. *Journal of Educational Administration and Foundations*, 20(1).
- Olabod, S.O., Olateju, O.I., & Bakare, A.B. 2019. An assessment of the reliability of secondary data in management science research. *International Journal of Business and Management Review*, 7 (3): 27-43
- Oliver, K., Aicken, C., & Arai, A. 2013. Making the most of obesity research: Developing research and policy objectives through evidence triangulation. *Evidence & Policy. A Journal of Research, Debate and Practice*, 9(2): 207–223. <https://doi.org/10.1332/174426413X662617>.
- Olson, J. D., McAllister, C., Grinnell, L. D., Gehrke Walters, K., & Appunn, F. 2016. Applying constant comparative method with multiple investigators and inter-coder reliability. *The Qualitative Report*, 21(1): 26–42.
- Omair, H.A. 2019. Stereotype Threat and STEM Self-Perceptions of Saudi College Stereotype Threat and STEM Self-Perceptions of Saudi College Women. *(College of Science and Health Theses and Dissertations. 292)*. DePaul University. Via Sapientiae.
- Opie, T. J., & Henn, C. M. 2013. Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *SA Journal of Industrial Psychology*, 39(1): 00–00. Retrieved from:

- http://www.scielo.org.za/scielo.php?script=sci_abstract&pid=S2071-07632013000100010&lng=en&nrm=iso&tlng=es [Accessed: 5 November 2017].
- Özbilgin, M. F., Beaugard, T. A., Tatli, A., & Bell, M. P. 2011. Work–life, diversity and intersectionality: A critical review and research agenda. *International Journal of Management Reviews*, 13(2): 177–198.
- Padma, S., & Reddy, M.S., 2013. Role of family support in balancing personal and work life of women employees. *International Journal of Computational Engineering & Management*, 16(3): 93-97.
- Padmanabhan, M., & Kumar, S.S. 2016. Work- life balance and work- life conflict on career advancement of women professionals in information and communication technology sector,
- Pallant, J. 2016. *SPSS survival manual: A step by step guide to data analysis using SPSS*
- Paludi, M. A., & Denmark, F. L. 2011. “Many Phantoms and Obstacles... Looming in Her Way”: Women Faculty in Academe. *Women as Leaders in Education. Succeeding despite Inequity, Discrimination, and Other Challenges*, 45–78.
- Pandu, A. B., Balu, A., & Poorani, K. 2013. Assessing Work-Life Balance among IT & ITeS Women Professionals. *The Indian Journal of Industrial Relations*, 48(4): 611–620.
- Park, Y. & Jex, S. 2011. Work and home boundary management using communication and information technology. *International Journal of Stress Management*, 18: 133-152.
- Parker, K., & Wang, W. 2013. Modern parenthood: Roles of moms and dads coverage as they balance work and family, Pew Research Centre. Retrieved from: http://www.pewsocialtrends.org/files/2013/03/FINAL_modern_parenthood_03-2013.pdf [Accessed: 17 February 2016].
- Parkes, L., & Langford, P. 2008. Work-life balance or work-life alignment. *Journal of Management & Organisation*, 14(3): 267–283.
- Pathak, A. K., Dubey, P., & Singh, D. 2019. Work-Life Balance Job Satisfaction: A Literature Review. *International Journal of Computer Sciences and Engineering*, 7(3): 182–187.
- Pätz, S.H. 2011. Gender and Technology: The ‘Female Factor’ in Software Design (*Submitted master’s thesis*). Continuing Education Center, Kraichtal, Germany
- Payton-Miyazaki, M., & Brayfield, A. 1976. *The good job and the good life: Relation of characteristics of employment to general well-being*. In A. D. Biderman & T E Drury (Eds), *Measuring Work Quality for Social Reporting*, pp: 125-150. New York: Wiley.
- Perrons, D., Fagan, C., McDowell, L., Ray, K., & Ward, K. 2005. Work, life and time in the new economy: An introduction. *Time and Society*, 14(1): 51–64.

- Perry-Smith, J.E., & Blum, T.C. 2000. Work-family human resource bundles and perceived organisational performance. *Academy of management Journal*, 43(6): 1107-1117.
- Pfau-Effinger, B. 2010. *Cultural and institutional contexts of housework and care work*, in Treas, J., and Drobnic, S. (eds), *Dividing the Domestic: Men, Women and Housework in Cross-National Perspective*. Stanford.
- Phiphitkul, W., & Sodarak, J. 2000. Gender Justice: Digitally Empowered Women Through Information Technology. Retrieved from: <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan038245.pdf>. [Accessed: 19 February, 2019].
- Pierret, C. R. 2006. The “sandwich generation”: Women caring for parents and children. *Monthly Labour Review*, September, 3-9.
- Pieterse, M., & Mostert, K. 2005. Measuring the work-home interface: Validation of the Survey Work-Home Interaction – Nijmegen (SWING) Instrument. *Management Dynamics*, 14(2): 2–15.
- Pitts, D., Marvel, J., & Fernandez, S. 2011. So hard to say goodbye? Turnover intention among US federal employees. *Public Administration Review*, 71(5): 751-760.
- Pocock, B., Charlesworth, S., & Chapman, J. 2013. Work-Family and Work-Life Pressures in Australia: Advancing Gender Equality in “Good Times? *International Journal of Sociology and Social Policy* 33 (9/10): 594–612. Retrieved from: <https://doi.org/10.1108/IJSSP-11-2012-0100> [Accessed: 17 April 2017].
- Pokpas, C., Craffert, L., Van Audehove, L., & Marien, I. 2019. Women and ICT in South Africa: Mental Models on Gender and ICT in Marginalised Communities. In *2019 IST-Africa Week Conference (IST-Africa)* (1-9). IEEE.
- Polit, D. F., & Beck, C. T. 2010. Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11): 1451–1458.
- Pookaiyaudom, G. 2015. Assessing different perceptions towards the importance of a work-life balance: A comparable study between Thai and international programme students. *Journal of Procedia Social and Behavioural Sciences*, 267–274.
- Poulose, S., & Sudarsan, N. 2017. Assessing the Influence of work-life balance dimensions among nurses in the Healthcare Sector, *The Journal of Management Development*, 36 (3): 427-437.
- Potgieter, S. C., & Barnard, A. 2010. The construction of work-life balance: the experience of black employees in a call-centre environment. *SA Journal of Industrial Psychology*, 36: 1–8.
- Powell, C., & Chang, M.A. 2016. Women in Technology as a Driver for Growth in Emerging Economies. Discussion Paper. Available at

https://www.cfr.org/content/.../Discussion_Paper_Powell_Chang_Women_ICT_O_R.pdf. [Accessed 31 October 2020].

- Powell, G., & Greenhaus, J. 2010. Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies. *Academy of Management Journal*, 53: 513–534.
- Pradhan, R., Jena, L., & Kumari, I. 2016. Effect of Work-life balance on Organisational citizenship behaviour: Role of Organisational commitment. *Global Business Review*, Sage Publication, 17(3).
- Prerna, L. 2012. Work / Life Balance in Corporate Sector. *International Journal of Marketing and Technology*, 1: 136-147.
- Prescott, J., & Bogg, J. 2011. Career attitudes of men and women working in the computer games industry. *Eludamos*, 5(1): 7–28.
- Pretorius, F., & De Villiers, E. 2009. Educators' perceptions of school climate and health in selected primary schools. *South African Journal of Education*, 29(1): 33-52.
- Pretorius, H., Mawela, T., Strydom, I., De Villiers, C., & Johnson, R. 2015. Continuing the Discourse of Women in Information Technology: A South African Perspective. *Gender, Technology and Development*, 19(3): 346–369.
- Pruyne, E., Powell, M., & J. Parsons, J. 2012. *Developing a Strategy for Employee Wellbeing: A Framework for Planning and Action*. Ashridge Business School, Nuffield Health.
- Pulevska-Ivanovska, L., Postolov, K., Janeska-Iliev, A., & Magdinceva Sopova, M., 2017. Establishing balance between professional and private life of generation Z. *Research in Physical Education, Sport and Health*, 6(1):3-10.
- Pumroy, K. H. 2016. *Adding her voice to the narrative career development experiences of women in engineering*. Unpublished doctoral dissertation. George Washington University, W
- Punch, K. 2003. Survey research: The basics. London: Sage Publications Inc. Washington D.C.
- Qu, H., & Zhao, X. 2012. Employees' work–family conflict moderating life and job satisfaction. *Journal of Business Research*, 65(1): 22–28.
- Quigley, D., Levine, A., Sonnenfeld, D.A., Brown, P., Tian, Q. and Wei, X. 2019. Survey on Using Ethical Principles in Environmental Field Research with Place-Based Communities. *Science and Engineering Ethics*, 25(2):.477-517.
- Quinlan, C., Babin, B., Carr, J., Griffin, M & Zikmund. W.G. 2015. Business Research Methods. 1st ed. London: Cengage Learning.
- Rai, S. 2009. India outsourcing workers stressed to the limit. Retrieved from: <http://www.zdnet.com/news/india-outsourcing-workers-stressed-to-the-limit/334715>. [Accessed: 19 June 2016].

- Rajesh, K., & Nishant, D. 2014. Work-life balance and Job Satisfaction among the Working Women of Banking and Education Sector – A Comparative Study. *International Letters of Social and Humanistic Sciences*, 10(20): 181–201.
- Ramdoss, K. 2012. Job demand, Family Supportive Organisational Culture and Positive Spillover from work-to-family among employees in the information technology enabled services in India. *International Journal of Business and Social Science*, 3(22): 33–41.
- Ramilo, C. 2002. National ICT policies and gender equality: Regional perspective-Asia. Paper presented at the conference on United Nations Division for the Advancement of Women Expert Group Meeting on Information and Communication Technologies and their impact on and use as an instrument for the advancement and empowerment of women, Seoul, Republic of Korea at <http://un.org/womenwatch/daw/egm/ict2002/reports/Paper-CRamilo.pdf> [Accessed: 23 October 2019].
- Randolph, S.A. 2016. The importance of employee breaks. *Workplace health & safety*, 64(7): 344-344.
- Rani, S., Kamalanabhan, T., & Selvarani, M. 2011. Work / Life Balance Reflections on Employee Satisfaction. *Serbian Journal of Management*, 6(1): 85-96.
- Rantanen, J., Kinnunen, U., Mauno, S., & Tillemann, K. 2011. Introducing theoretical approaches to work-life balance and testing a new typology among professionals. In S. Kaiser, M. J. Ringlstetter, M. Pina e Cunha, & D. R. Eikhof (Eds.), *Creating balance? International Perspectives on the Work-Life Integration of Professionals* (pp: 27-46). Berlin/Heidelberg: Springer.
- Raosoft sample size calculator. 2004. Raosoft Inc. Retrieved at <http://www.raosoft.com/samplesize.html>. [Accessed: 13 August, 2020].
- Rapoport, R., Bailyn, L., Fletcher, J., & Pruitt, B. 2002. *Beyond Work–Family Balance: Advancing Gender Equity and Work Performance*. Chichester: Wiley.
- Rau, B., & Hyland, M. 2002. Role conflict and flexible work arrangements: the effects on applicant attraction. *Personnel Psychology*, 55, 111–136.
- Raymond, L., & Fitz, S.M. 2004. The effects of work demands and resources on work to-family conflict and facilitation. *Journal of Marriage and Family*, 66: 398 412.
- Razavi, S. 2007. *The Political and Social Economy of Care in a Development Context: Conceptual Issues, Research Questions and Policy Options*, Geneva: This United Nations Research Institute for Social Development (UNRISD).
- Rizavi, S. S., & Sofer, C. 2010. Household division of labor: Is there any escape from traditional gender roles?

- Reddi, U. 2011. The Linkage between ICT Applications and Meaningful Development. In Module 1 of The Academy of ICT Essentials for Government Leaders. Retrieved from http://www.unapcict.org/academy/academy-modules/english-version/Academy%202.0%20Module%201.pdf/at_download/file [Accessed: 5 May 2018]
- Reddi, U., & Vemraju, R. 2006. Using ICTs to Bridge the Digital Divide, in Gurumurthy, A., Singh, P. J., Mundkur, A., Swamy, M. (eds) *Gender in the Information Society: Emerging issues*, UNDP. *Asia-Pacific Development Information Programme (APDIP), Thailand*, 53 – 64.
- Reddy N.K., Vranda, M.N., Ahmed, A., Nirmala B.P., & Siddaramu, B. 2010. Work family conflict and family work conflict, its relationship to gender, age and marital status. *Indian Journal of Psychological Medicine* 32(2): 112-118.
- Reddy, I. 2015. Balancing work and family: A challenge for career women (unpublished master's thesis). Durban: University of KwaZulu-Natal.
- Regter, S. 2018. SAICE parts ways with Manglin Pillay following sexist article. Retrieved from EWN: <https://ewn.co.za/2018/09/07/saice-parts-ways-with-manglinpillay-following-sexist-article> [Accessed: 23 May 2020].
- Rehman, S., & Roomi, M. 2012. Gender and work-life balance: A phenomenological study of women entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*, 19(2): 209–228.
- Reid, K., & Dawson, D. 2001. Comparing performance on a simulated 12- hour shift rotation in young and older subjects. *Occupational & Environmental Medicine*, 58, 58-62.
- Richardson, J. 2010. Managing flex workers: holding on and letting go. *Journal of Management Development*. 29 (2): 137-147.
- Rindfuss, R., Swicewood, G., & Rosenfeld, A. 1987. Disorder in the Life Course: How Common and Does It Matter? *American Sociological Review*, 52: 785–801.
- Riordan, C. 2013. Work-life “balance” isn’t the point. Retrieved from: <http://blogs.hbr.org/2013/06/work-life-balance-isn't-the-poi/> [Accessed: 22 August 2018].
- Rizavi, S. S., & Sofer, C. 2010. Household Division of Labour: Is There Any Escape from Traditional Gender Roles? *Cahiers de la Maison des Sciences Economiques, L'Atelier Paris1-Le Caire*, Cairo.
- Roberta, H., & Alison, T. 2015. *Validity and Reliability in Quantitative Studies*. Accessed from <http://ebn.bmj.com/content/18/3/66>. [Date accessed: 12 November 2019].
- Robnett, R. D. 2016. Gender bias in STEM fields. *Psychology of Women Quarterly* 40 (1):65–79. doi:10.1177/0361684315596162.

- Roe, R., Ten Horn, L., Zinvieva, I., & Dienes, E. 1997. Extended Delft Measurement Kit for Quality of Working Life. Technical Guideline, Tilburg; WORC-Tilburg University. WMQ –Document 010-97-EXT-EN.
- Rogers, M. 2011. Telecommuting: You Don't Know What You're Missing. *AMWA Journal*. 26 (4): 162-164.
- Ross, K.N. 2005. *Educational research: Some basic concepts and terminology*. Paris: International Institute for Educational Planning/UVESCO.
- Rotondi, V., Stanca, L., & Tomasuolo, M. 2017. Connecting alone: Smartphone use, quality of social interactions and well-being, *Journal of Economic Psychology*, 63: 17–26.
- Rousseau, D. 2001. Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organisational Psychology*, 74(4): 511–42.
- Rubin, H.J., & Rubin, I.S. 2011. *Qualitative interviewing: The art of hearing data*. CA: Sage.
- Runte, M., & Mills, A. 2004. Paying the toll: A feminist post-structural critique of the discourse bridging work and family. *Culture and Organisation*, 10(3): 237–249
- Russo, M., Buonocore, F., Carmeli, A., & Guo, L. 2018. When family supportive supervisors meet employees' need for caring: Implications for work–family enrichment and thriving. *Journal of Management*, 44(4):1678-1702.
- Russo, M., Shteigman, A., & Carmeli, A. 2015. Workplace and family support and work–life balance: Implications for individual psychological availability and energy at work. *The Journal of Positive Psychology*, 9760: 1–16.
- Ryklief, Y. 2018. *Barriers and Enablers to Vocational IT Education: Responding to South Africa's ICT Skills Crisis*. Unpublished thesis. University of Cape Town, Cape Town.
- Saadın, I., Ramli, K., Johari, H., & Harin, N. 2016. Women and Barriers for Upward Career Advancement – A Survey at Perak State Secretariat, Ipoh, Perak. *Procedia Economics and Finance*, 36(1): 574–581.
- Sail, J., & Pawar, P. 2013. A study on performance management and work-life balance of corporate working women. *International Monthly Refereed Journal of Research in Management & Technology*, 2: 57–89.
- Saldaña, J. 2013. *The coding manual for qualitative researchers*, 2nd edn., Sage, London.
- Saldana, J. 2016. *The Coding Manual for Qualitative Researchers*. CA: Thousand Oaks. Sage.
- Saleem, A. 2015. Impact of life and job domain characteristics on work-life balance of textile employees in Pakistan. *Science International*, 27(3): 2409–2416.
- Sandberg, S. 2013. *Lean in: Women, Work, and the Will to Lead*. New York: Random House.
- Santhana, L. K., Gopinath S. S. 2013. Work Life Balance of Women Employees with reference to Teaching faculties. *International Monthly Refereed Journal of Research in Management and Technology-II*.

- Santhi, T., & Sundar, K. 2012. A Study on the Work-life balance of Women Employees in Information Technology Industry. *Zenith International Journal of Business Economics and Management Research*, 2(1): 82–96.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., & Jinks, C. 2017. Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4): 1893–1907. <https://doi.org/10.1007/s11135-017-0574-8>.
- Saunders, M., Lewis, P., & Thornhill. 2009. Understanding research philosophies and approaches. *Research Methods for Business Students*, 4:106–135.
- Saxbe, D., Repetti, R., & Graesch, A. 2011. Time spent in the housework and leisure: Links with parents' physiological recovery from work. *Journal of Family Psychology*, 25(2): 271–281.
- Sayah, S., & Stefan, S. 2013. Conflict between Work and Life: The Case of Contract Workers in the German IT and Media Sectors. *Management Revue*, 24(3): 222–244.
- Schein, E. 2010. *Organisational Culture & Leadership* (4th ed.). San Francisco: Jossey-Bass.
- Schieman, S., & Young, M. 2013. Are communications about work outside regular working hours associated with work-to-family conflict, psychological distress and sleep problems? *Work & Stress*, 27(3): 244–261.
- Schieman, S., Milkie, M., & Glavin, P. 2009. When work interferes with life: Work-nonwork interference and the influence of work-related demands and resources. *American Sociological Review*, 74(6): 966–988.
- Schofield, A. 2017. *Joburg Centre for Software Engineering ICT Skills Survey*. schools_An_island_of_gender_dominance_in_STEM_subjects [Accessed: 23 May 2020].
- Schultz, N., Hoffman, M., Fredman, A., & Bainbridge, A. 2012. The work and life of young professionals: Rationale and strategy for balance. *Qualitative Research Reports in Communication*, 13(1): 44–52. Retrieved from: <https://doi.org/10.1080/17459435.2012.719208> [Accessed: 7 November 2017].
- Scotland, J. 2012. Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9): 9-16.
- Sears, H., & Galambos, N. 1992. Women's work conditions and marital adjustment in two-earner couples: A structural model. *Journal of Marriage and the Family*, 54(4): 789–798.
- Seeley, A. 2015. *Work-Family Balance: An Interpretive Approach to Understanding Perceptions and Strategies of Dual-Earner Couples in Cape Town, South Africa*. (Unpublished Masters' thesis). University of South Africa, Cape Town.

- Seery, B., Corrigan, E., & Harpell, T. 2008. Job-related emotional labor and its relationship to work-family conflict and facilitation. *Journal of Family and Economic Issues*, 29: 461–477.
- Sekaran, U., & Bougie, R. 2010. *Research methods for business: A skill building approach* (3rd ed.). West. Sussex, UK: John Wiley & Sons.
- Sekaran, U., & Bougie, R. 2012. *Research methods for business: A skill building approach* (5th ed.). West. Sussex, UK: John Wiley & Sons.
- Settersten, R. A. 2003. *Age structuring and the rhythm of the life course*. In *Handbook of the life course* (81-98). Springer, Boston, MA.
- Shafer, E. F. 2011. Wives' relative wages, husbands' paid work hours, and wives' Labor-Force exit. *Journal of Marriage and Family*, 73(1): 250-263. doi:10.1111/j.1741-3737.2010.00802. x.
- Shaffer, M., Joplin, J., & Hsu, Y.-S. 2011. Expanding the boundaries of work-family research: a review and agenda for future research. *International Journal of Cross-Cultural Management*, 11(2): 221–268. Retrieved from: <https://doi.org/10.1177/1470595811398800> [Accessed: 5 December 2017].
- Shagvaliyeva, S., & Yazdanifard, R. 2014. Impact of Flexible Working Hours on Work-Life Balance. *American Journal of Industrial and Business Management*, 4: 20-23.
- Shange, N. 2018. Top engineer Manglin Pillay apologises for sexist article. Retrieved from Times Live: <https://www.timeslive.co.za/news/south-africa/2018-0813-top-engineer-manglin-pillay-apologises-for-sexist-article/> [Accessed: 23 May 2020].
- Shiva, G. 2013. A study on Work Family Balance and Challenges faced by working women. *IOSR Journal of Business and Management*, 14(5): 1–4.
- Shiva, G. 2013. A study on Work Family Balance and Challenges faced by working women. *IOSR Journal of Business and Management*, 14(5): 1–4.
- Shuttleworth, M. 2009. Definition of reliability. Retrieved from: [Accessed: 1 April 2020].
- Silverman D. 2009. *Doing Qualitative Research*. Newbury Park, London: SAGE Publications Ltd.
- Simard, C., Henderson, A. D., Gilmartin, S. K., Schiebinger, L., & Whitney, T. (2008) *Climbing the Technical Ladder: Obstacles and Solutions for Mid-Level Women in Technology*, Stanford University: Michelle R. Clayman Institute for Gender Research/Anita Borg Institute.
- Singh, Y. P. 2013. Quality of work life and its impact on organisational performance. *Asia Pacific Journal of Management & Entrepreneurship Research*, 2: 240–246.
- Singley, S. G., & Hynes, K. 2005. Transitions to parenthood work–family policies, gender, and the couple context. *Gender & Society*, 19(3): 376–397.

- Singpurwalla, D. 2013. *A handbook of statistics. An overview of statistical methods*. Retrieved from: <http://www2.aku.edu.tr/~icaga/kitaplar/a-handbook-of-statistics.pdf>. [Accessed: 1 April 2020].
- Solanki, K. R. 2013. Flextime association with job satisfaction, work productivity, motivation & employees stress levels. *Journal of Human Resource Management*, 1(1): 9 – 14.
- Song, Y., & Gao, J. 2018. *Does Telework Stress Employees Out? A Study on Working at Home and Subjective Well-Being for Wage/Salary Workers*, Discussion Paper No. 11993, Institute for Labour Economics.
- Sorgner, A., Bode, E., Krieger-Boden, C., Aneja, U., Coleman, S., Mishra, V., & Robb, A. 2017. The effects of digitalization on gender equality in the G20 economies. Kiel: Kiel Institute for the World Economy.
- South Africa. 1998. Employment Equity Act 55 of 1998: code of good practice on the integration of employment equity into human resource policies and practices. Retrieved from: <http://www.labour.gov.za>. [Accessed: 12 January 2016].
- South Africa. 2002. *Basic Conditions of Employment Act 75 of 1997 (online)*. Retrieved from: <http://www.labour.gov.za> [Accessed 12 January 2016].
- South Africa. Department of Higher Education and Training. 2018. Statistics on post-school education and training in South Africa: 2016. [Accessed: 4 December 2019].
- South African Board of People Practice (SABPP). 2013. Women's report 2013. Johannesburg: University of Johannesburg.
- South African Institution of Civil Engineering. 2018. Official Media Statement. Retrieved from SAICE: <http://saice.org.za/saice-apologises-for-ceo-article/> [Accessed: 23 May 2020].
- Sparkes, A. C., & Smith, B. 2014. *Qualitative research methods in sport, exercise and health: From process to product*. London, England: Routledge.
- Sullivan, S.E., & Mainiero, L.A. 2007. Kaleidoscope careers: Benchmarking ideas for fostering family-friendly workplaces. *Organisational Dynamics*, 36(1).
- Sweet, S., Pitt-Catsoupes, M., Besen, E., & Golden, L. 2014. Explaining organisational variation in flexible work arrangements: Why the pattern and scale of availability matter. *Community, Work & Family*, 17(2): 115-141.
- Valk, R., & Srinivasan, V., 2011. Work–family balance of Indian women software professionals: A qualitative study. *IIMB Management Review*, 23(1): 39-50.
- Statistics South Africa. 2012. Census 2011 Statistical release – P0301.4, Republic of South Africa, Pretoria, South Africa.
- Statistics South Africa. 2013. *A survey of time use, 2010*. Retrieved from

- <http://beta2.statssa.gov.za/publications/Report-02-02-00/Report-02-02-002010.pdf>
[Accessed: 12 May 2016].
- Statistics South Africa. 2016. QLFS_Trends_2008-2016. Retrieved from:
http://www.statssa.gov.za/?page_id=1866&PPN=P0277&SCH=6683 [Accessed:
26 May 2017].
- Statistics South Africa. 2019. QLFS_Trends_2019. Retrieved from:
<http://www.statssa.gov.za/> [Accessed: 26 March 2020].
- StatsSA. 2015. Census 2015 Statistical release. Republic of South Africa, Pretoria, South Africa. Retrieved from: <http://www.statssa.co.za> [Accessed: 25 June 2015].
- Strazdins, L., Clements, M., Korda, R., Broom, D., & D'Souza, R. 2006. Unsociable work? nonstandard work schedules, family relationships, and children's well-being. *Journal of Marriage and the Family*, 68(2): 394–410.
- Sturges, J. 2008. All in a day's work? Career self-management and the management of the boundary between work and non-work. *Human Resource Management Journal*, 18(2): 118–134.
- Sturges, J., & Guest, D. 2004. Working to live or living to work? Work/life balance early in the career. *Human Resources Management Journal*, 14(4): 5-20.
- Styhrea, A. 2011. The overworked site manager: gendered ideologies in the construction industry. *Construction Management and Economics*, 29(9): 943–955.
- Sullivan, C. & Lewis, S. 2001. Home-based telework, gender, and the synchronization of work and family: perspectives of teleworkers and their co-residents. *Gender, Work & Organisation*, 8(2):123-145.
- Sullivan, C. 2015. 'Bad Mum Guilt': The representation of 'work-life balance' in UK womens' magazines. *Community, Work & Family*, 18(3): 284–298. <https://doi.org/10.1080/13668803.2014.970128>
- Sutherland, E. 2014. *Governance of Telecommunications: Two decades of reform in South Africa. 1994-2014- 20 Years of South African Democracy (pp. 1-21)*. Oxford: LINK Centre.
- Swafford, L. G. 2014. Elements and evaluation of qualitative research. *Radiation Therapist*, 23(1): 90.
- Sweet, S., Besen, E., Pitt-Catsoupes, M., & McNamara, T. 2014. Do options for job flexibility diminish in times of economic uncertainty? *Work, Employment and Society*, 28(6): 882–903.
- Sweigart, A. 2012. Women on board for change: The Norway model of boardroom quotas as a tool for progress in the United States and Canada. *North-Western Journal of International Law & Business*, 32(2): 81–105.

- Swift, L. 2002. Work-life balance important in relief world, too. Reuters AlertNet. Retrieved from <http://www.alertnet.org/thefacts/reliefsources> [Accessed: 20 October 2019].
- Tamariz, L., Palacio, A., Robert, M., & Marcus, E. N. 2013. Improving the informed consent process for research subjects with low literacy: A systematic review. *Journal of General Internal Medicine*, 28: 121–126. <https://doi.org/10.1007/s11606-012-2133-2>.
- Tang, N., & Cousins, C. 2005. Working time, gender and family: an east-west European comparison. *Gender, Work and Organisation*, 12(6): 527–550.
- Tasnim, M., Hossain, M.Z., & Enam, F. 2017. Work-Life Balance: Reality check for the working women of Bangladesh. *Journal of Human Resource and Sustainability Studies*, 5(1): 75-86.
- Tausig, M., & Fenwick, R. 2011. *Work and Mental Health in Social Context*. New York: Springer Publishing Company.
- Teijlingen, E., 2014. *Semi-structured interviews*, Bournemouth: Bournemouth University.
- Telkom Human Resource Information Systems Department. 2018. [Online]. Retrieved from: <http://www.telkom.co.za> [Accessed: 28 October 2018].
- Telkom SA SOC Ltd. 2018. *Telkom Integrated Report*. Retrieved from www.telkom.co.za/ir [Accessed: 11 August 2019].
- Telkom. 2005. 'Corporate profile – Telkom Group'. Retrieved from: http://www.telkom.co.za/about_us/downloads/TELKOM-corporate-profile.pdf [Accessed 17 May 2017].
- Telkom. 2015. *Hours of Work: (Other Working Opportunities and Overtime)*. Pretoria. Total Remuneration & Management Human Resources.
- Telkom. 2018. *The Telkom Touch Policy Manual*. Pretoria. Total Remuneration & Management Human Resources.
- ten Brummelhuis, L., Oosterwaal, A., & Bakker, A. 2012. Managing family demands in teams: The role of social support at work. *Group & Organisation Management*, 37(3): 376–403.
- Tharshini, U., Kumar, S., & Rathnasekara, H. 2016. Climbing ladders of success: Perceptions of barriers to public sector career advancement in Jaffna District, Sri Lanka. *South Asian Journal of Human Resources Management*, 3(1): 1–24.
- The Skills Portal. 2012. Help women climb the corporate ladder. Retrieved from: <http://www.skillsportal.co.za/page/human-resource/1237343-Help-women-climb-the-corporateladder#.VDj7QvmSxoM> [Accessed: 18 February, 2019].
- The Union for the Mediterranean. 2015. *Women economic participation and ICT in the Mediterranean Region: Constraints and opportunities*. Paris. European Union.

- The World Bank, 2016. World Development Report 2016: Digital Dividends. Retrieved from: <http://www.worldbank.org/en/publication/wdr2016> [Accessed: 23 May 2020].
- The World Economic Forum Report. 2019. A 2020 outlook on women in ICT in South Africa
- The World Factbook and US Global Population Census figures. 2018. Washington, DC: Central Intelligence Agency
- Thompson, C.A, Beauvais, L.L., & Lyness, K.S. 1999. When work–family benefits are not enough: The influence of work–family culture on benefit utilisation, organisational attachment, and work–family conflict. *Journal of Vocational Behaviour* 54(3): 392–415.
- Thornton, G. *Still only a quarter of business positions filled by women in SA*. 2014. Retrieved from: <http://business-humanrights.org/en/so-africa-survey-reveals-that-business-falling-short-on-gender-parity-with-only-26-of-senior-management-positions-held-by-women#c89388> [Accessed: 18 December 2019].
- Thrash, C., & Warner, T.D. 2016. The geography of normative climates: An application to adolescent substance use. *Journal of Youth and Adolescence*, 45, 1587–1603.
- Timmer, A. S. H., & Senden, L. A. J. 2016. *A comparative analysis of gender equality law in Europe 2015*. Luxemburg: Publications Office of the European Union.
- Tipping, S., Chanfreau, J., Perry, J., & Tait, C. *The Fourth Work-Life Balance Employee Survey*. Department for Business, Innovation and Skills (BIS), London.
- Tlaiss, H.A. 2014. Between the traditional and the contemporary: careers of women managers from a developing Middle Eastern country perspective, *International Journal of Human Resource Management*, 25(20): 2858-2880.
- Tlaiss, H.A., & Dirani, K.M. 2015. Women and training: an empirical investigation in the Arab Middle East, *Human Resource Development International*, 18 (4): 366-386.
- Toe, T. 2011. *In Myanmar, Men Are Leading the IT Industry and Women Are Lagging,* " *The Irrawaddy*, May 8, 2011, <http://www.irrawaddy.com/interview/in-myanmar-men-are-leading-the-it-industry-and-women-are-lagging.html> [Accessed: 5 June 2017].
- Toepoel, V. 2016. *Doing surveys online*. London: Sage Publications Limited.
- Toffoletti, K., & Starr, K. 2016. Women academics and work–life balance: Gendered discourses of work and care. *Gender, Work & Organisation*, 23(5): 489–504. Retrieved from: <https://doi.org/10.1111/gwao.12133> [Accessed: 12 June 2017].
- Tomazevic, N., Kozjek, T & Stare, J. 2014. The Consequences of a Work-Family Balance: From the point of View of Employers and Employees. *International Business Research*, 7 (8).
- Torrance, H. 2012. Triangulation, respondent validation, and democratic participation in mixed methods research. *Journal of Mixed Methods Research*, 6: 111–123.

- <https://doi.org/10.1177/1558689812437185>.
- Tracy, S. J. 2013. *Qualitative research methods: Collecting evidence, crafting analysis*. West Sussex, England: John Wiley & Sons.
- Trauth, E., Quesenberry, J., & Huang, H. 2008. A multicultural analysis of factors influencing career choice for women in the information technology workforce. *Journal of Global Information Management*, 16(4): 1–23.
- Trauth, E.M. 2002. Odd girl out: an individual difference perspective on women in the IT profession. *Information Technology & People* 15, 2; ABI/INFORM Global
- Trautwein, C. 2014. *Geek Girls to Tackle Tech Gender Gap*, " Myanmar Times, October 27, 2014, <http://www.mmtimes.com/index.php/business/technology/12101-girls-are-geeks-too.html> [Accessed: 5 June 2017].
- Tremblay, D.G.2002. Balancing work and family with telework? Organisational issues and challenges for women and managers. *Women in Management Review*.
- Truath, E.M. Quesenberry, J.L., & Huang, H. 2009. Retaining women in the U.S IT workforce: theorizing the influence of organisational factors'. *European Journal of Information Systems*, suppl. Including Special Section on Meeting Renewed Demand 18.5 (October 2009): 476-497. Palgrave Macmillan publishers
- Turner, D. W., III. 2010. Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3): 754–760.
- UNESCO Science Report. 2015. *Towards 2030*. Paris, France : UNESCO Publishing.
- United Nations Women. 2018. Turning promises into action: Gender equality in the 2030 agenda for sustainable development. Retrieved from <http://www.unwomen.org/en/digital-library/sdg-report> [Accessed: 20 October 2019].
- Valcour, M. 2007. Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology*, 92, 1512-152.
- Valenduc, G., Vendramin, P., Guffens, C., Ponzellini, A.M., Lebano, A., d'Ouville, L., Collet, I., Wagner, I., Birbaumer, A., Tolar, M. and Webster, J., 2004. *Widening women's work in information and communication technology*. Brussels: European Commission.
- Valk, R., & Srinivasan, V. 2011. Work Family balance of Indian women software Professionals. A Qualitative study. *Science Direct*, 41-42.

- Van Aarde, A., & Mostert, K., 2008. Work-home interaction of working females: What is the role of job and home characteristics? *SA Journal of Industrial Psychology*, 34(3):1-10.
- Van Den Berg, H. S., & Van Zyl, E. S. 2008. A cross-cultural comparison of the stress experienced by high-level career women. *SA Journal of Industrial Psychology*, 34(3): 17–21.
- Vázquez, S. 2010. ‘Los dilemas de las ingenieras jóvenes en el sector TIC’ in Castaño, C. (ed) (2010) *Género y TIC. Presencia, posición y políticas*, Barcelona: Editorial UOC, Colección La Sociedad Red.
- Veale, C. & Gold, J. 1998. Smashing into the glass ceiling for women managers. *Journal of Management Development*, 17(1): 17-26.
- Vehovar, V., & Manfreda, K.L. 2008. *Overview: online surveys*. The SAGE handbook of online research methods, 1.
- Verboord, M. 2013. *Quantitative Methods in Media and Communication*. London: Sage Publications.
- Vermeulen, M. M. 2017. *Exploring the desired features of a Family Friendly Programme (Unpublished masters’ thesis)*. University of Pretoria, Pretoria.
- Verniers, C., & Vala, J. 2018. Justifying gender discrimination in the workplace: The mediating role of motherhood myths. *PloS one*, 13(1), p.e0190657.
- Vlasnik, A. L. 2011. Historical constructs of gender and work: Informing access and equity in US higher education. *MA Paludi (Series Ed.) & JL Martin (Vol. Ed.), Women as Leaders in Education*. Santa Barbara, California: Praeger, 1: 23–44.
- Vorster, G. 2012. *DOC minister calls for ICT policy overhaul*. [Online]. Retrieved from: <http://businesstech.co.za/news/government/10320/doc-minister-calls-for-ict-policyoverhaul/> [Accessed 20 May 2020].
- Voydanoff, P. 2007. *Work, family, and community: Exploring interconnections*. New Jersey: Lawrence Erlbaum Associates.
- Walter, L. 2013. 5 ways to achieve and maintain work-life balance. *EHS Today*, 6(6): 10.
- Wang, J., & Verma, A. 2012. Explaining organisational responsiveness to work-life balance issues: The role of business strategy and high-performance work systems. *Human Resource Management*, 51(3): 407–432. Retrieved from: <https://doi.org/10.1002/hrm.21474> [Accessed: 3 February 2017].
- Wang, X. 2013. Why students choose STEM majors: Motivation, high school learning, and postsecondary context of support. *American Educational Research Journal*, 50: 1081–1121.

- Ward, K., & Eddy, P. 2013. Women and academic leadership: Leaning out. Retrieved from: <http://chronicle.com/article/WomenAcademic-Leadership-/143503/> [Accessed: 2 May, 2016].
- Warmbrod, J.R. 2014. Reporting and interpreting statistics derived from Likert type scales. *Journal of Agricultural Education*, 55(5): 30-47.
- Waterman, A.S., 2013. The humanistic psychology–positive psychology divide: Contrasts in philosophical foundations. *American Psychologist*, 68(3): 124.
- Wattis, L., Standing, K., & Yerkes, M. A. 2013. Mothers and work–life balance: Exploring the contradictions and complexities involved in work–family negotiation. *Community, Work & Family*, 16(1):1–19. Retrieved from: <https://doi.org/10.1080/13668803.2012.722008> [Accessed: 5 May 2017].
- Wepfer, A., Brauchli, R., Jenny, G., Hämmig, O., & Bauer, G. 2015. The experience of work-life balance across family-life stages in Switzerland: a cross-sectional questionnaire-based study. *BMC Public Health*, 15(1): 29–78.
- Western Institutional Review Board. (2016). *A guide for researchers, Version 4.23*. Retrieved from <http://www.wirb.com/Documents/Guide%20for%20Researchers.pdf> [Accessed: 13 May 2018].
- Wethington, E. 2005. An Overview of the Life Course Perspective: Implications for Health and Nutrition. *Journal of Nutrition Education and Behaviour*, 37: 115–120.
- Wheatley, D. 2012. Good to be home? Time-use and satisfaction levels among home-based teleworkers. *New Technology, Work and Employment*. 27 (3): 224-241.
- Wheaton, B., & Gotlib, I. 1997. *Stress and Adversity Over the Life Course*. Cambridge: Cambridge University Press
- Wiid, J. & Diggines, C. 2015. *Marketing Research* (3rd ed). Cape Town: Juta & Co.
- Wiid, J., & Diggines, C. 2013. *Marketing research* (2nd ed.). Cape Town: Juta and Company Ltd.
- Wilson, F.M. 2002. Management and the professions: How cracked is that glass ceiling? *Public Money & Management*, 22: 15-20.
- Wirtz, A., Nachreiner, F., & Rolfes, K. 2011. Working on Sunday-effects on safety, health, and work-life balance. *Chronobiology International*, 28(4): 361–370.
- WISAT (Women in Global Science and Technologies) Report: National Assessments on Gender and STI 2018.<http://wisat.org/> [Accessed: 7 December 2019].
- Wise, S., & Bond, S. 2003. Work-life policy: Does it do exactly what it says on the tin? *Women in Management Review*, 18, 20-31.
- Wohlin, C. & Aurum, A. 2014. Towards a decision-making structure for selecting a research design in empirical software engineering. *Journal of Systems and Software*, 98: 1-

- World Development Report. 2019. *2019 World Development Report: The changing nature of work*. Washington, DC: World Bank Group.
- World Development Report. 2019. *2019 World Development Report: The changing nature of work*. Washington, DC: World Bank Group.
- World Economic Forum. 2016. *Global Competitiveness Report 2015-2016*. Geneva: World Economic Forum.
- Xie, J., Ma, H., Zhou, Z., & Tang, H. 2018. Work-related use of information and communication technologies after hours (W_ICTs) and emotional exhaustion: A mediated moderation model, 76: 94–104.
- Xobni. 2010. New survey from Xobni on email overload shows: There is no such thing as a day off for Americans and Brits. Retrieved from: <http://goo.gl/nH74sz> [Accessed: 19 February, 2019].
- Yanchar, S. C. 2015. Truth and disclosure in qualitative research: Implications of hermeneutic realism. *Qualitative Research in Psychology*, 12: 107–124. <https://doi.org/10.1080/14780887.2014.933460>.
- Yansen, G., & Zukerfeld, M., 2014. Why don't women program? Exploring links between gender, technology and software. *Science, Technology and Society*, 19(3): 305-329.
- Yapp, R. 2018. *Working Women still do housework*. Retrieved from Daily Mail <http://www.dailymail.co.uk/news/article-206381/Working-women-housework.html> [Accessed: 29 May 2020].
- Yarwood, G. A., & Locke, A. 2016. Work, parenting and gender: the care–work negotiations of three couple relationships in the UK. *Community, Work & Family*, 19(3): 362–377.
- Yavas, U., Karatepe, O. M., & Babakus, E. 2011. Do customer orientation and job resourcefulness moderate the impact of interrole conflicts on frontline employees' performance? *Tourism and Hospitality Research*, 11(2): 148–159 Retrieved from: <http://dx.doi.org/10.1057/thr.2010.25> [Accessed: 30 April 2017].
- Yeasmin, S., & Rahman, K. 2012. Triangulation' Research Method as the Tool of Social Science Research. *BUP Journal*, 1(1): 154-161.
- Yong, A.G. & Pearce, S. 2013. A beginner's guide to factor analysis: Doing an exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2):79-94.
- Young, M. B. 1999. Work-family backlash: begging the question, what's fair? *The ANNALS of the American Academy of Political and Social Science*, 562(1): 32–46.

- Zhao, Y., & Lord, B. R. 2016. Chinese women in the accounting profession article information. *Meditari Accountancy Research*, 24(2): 226–245. <https://doi.org/10.1108/MEDAR-082015-0058>.
- Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. 2015. Developing individual and organisational work-life balance strategies to improve employee health and wellbeing. *Employee Relations*, 37(3): 354–379.
- Zohrabi, M. 2013. Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3: 254–262. <https://doi.org/10.4304/tpls.3.2.254-262>.

APPENDIX A: GATE KEEPERS LETTER

PERMISSION TO CONDUCT DATA COLLECTION FOR RESEARCH PROJECT



Group Human Resources,
Telkom SA Limited,
Centurion 0157,
Pretoria, 0001, RSA.
Tel +27 012 311 6513.
Fax +27 012 323 0775.
E-mail: yniekem1telkom@outlook.com
yniekem1@telkom.co.za

To: Mr. W. Munyeka

Student number: 217076380

University of KwaZulu-Natal (Pietermaritzburg Campus),

King Edward Avenue Scottsville,

Private Bag X01,

Scottsville,

3209.

Pietermaritzburg.

Re: Permission to conduct research at Telkom Headquarters

Approval is hereby given that MUNYEKA, W may conduct research in Telkom on *"WORK-LIFE BALANCE: A CASE OF FEMALE INFORMATION AND COMMUNICATION TECHNOLOGY PROFESSIONALS AT A TELECOMMUNICATIONS COMPANY."* However, the research information is subject to clearance by Telkom's External Reporting and HR divisions. Yours sincerely



Mrs M van Niekerk,

HR Manager Group Human Resources,

Telkom SA Ltd.

Date: 30th May, 2018.



Telkom Mobile, Ground, 92 Oak Avenue, Highveld Park, Centurion, Centurion, Pretoria, 0157
Telkom SA Limited Registration number 1991/005476/06

APPENDIX B1: ETHICAL CLEARANCE LETTER



24 August 2018

Mr Wiza Munyeka (217076380)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Mr Munyeka,

Protocol reference number: HSS/0810/018D

Project Title: Work-life Balance: A case of female Information and Communication Technology professionals at a Telecommunications Company

Approval Notification – Expedited Application

In response to your application received 25 June 2018, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



.....
Professor Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Brian K Majola
Cc Academic Leader Research: Professor Isabel Martins
Cc School Administrator: Ms Debbie Cunynghame

Humanities & Social Sciences Research Ethics Committee

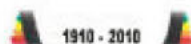
Professor Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4809 Email: smbap@ukzn.ac.za / smmanm@ukzn.ac.za / mohunp@ukzn.ac.za

Website: www.ukzn.ac.za



100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

APPENDIX B2: AMENDED ETHICAL CLEARANCE LETTER



05 March 2019

Mr Wiza Munyeka (217076380)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Mr Munyeka,

Protocol reference number: HSS/0810/018D

Project Title: Work-life Balance: A case of female Information and Communication Technology professionals at a Telecommunications Company

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 01 March 2019 has now been approved as follows:

- Change in Supervisor

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of original issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully



Dr Rosemary Sibanda (Chair)

/ms

Cc Supervisor: Dr Ashika Maharaj
Cc Academic Leader Research: Professor Isabel Martins
Cc School Administrator: Ms Debbie Cunynghame

Humanities & Social Sciences Research Ethics Committee

Professor Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za

Website: www.ukzn.ac.za



100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

APPENDIX C PERMISSION TO CONDUCT RESEARCH INFORMED CONSENT FORM: QUESTIONNAIRE

Email Invitation



College of Law and Management Studies,
School of Management, Information Technology and Governance,
Private Bag X01 Scottsville,
Pietermaritzburg 3209,
South Africa.

E-mail: masterwiza2000@yahoo.com
217076380@stu.ukzn.ac.za

To whom it may Concern

RE: PERMISSION TO CONDUCT RESEARCH

My introduction

I am a Ph.D. student registered with University of KwaZulu-Natal, Pietermaritzburg Campus, South Africa. I am currently (2017) conducting an empirical study.

What is this study about?

The study is: Work-life balance: A case of female Information and Communication Technology professionals at a telecommunications company. I would like to invite you to participate in an online survey. Within the context of this study, various elements of Work life behaviours in terms of experiences and the Information and Communications Technology (ICT) profession, will be of interest. It is anticipated that this study will provide critical insight into the work-life balance of females, in a male-dominated sector like Information and Communications Technology (ICT).

Why your views are important for this study?

I am sending this survey to ICT female employees only within your department in order to find out the experiences of female (ICT) professionals. In this study the purpose is to learn about the various experiences of female (ICT) professionals. Whilst taking part is unlikely to directly benefit you as respondents of this study, it is hoped that taking part in this study will help other people in the future identify important elements that would help female (ICT) professionals in the Information and Communications Technology (ICT) profession. Once the research is completed, if you are interested in the findings of the study, I will be open to sending you a

summary, to give you an insight into where your organisation is in terms of work-life balance issues.

What do you have to do?

This will be a google drive-based survey, and if you would like to take part, please complete the survey by clicking on the link that will be provided. The survey is short and straight forward and should take you 20-25 minutes to complete. At the end of the survey, there is another link asking whether you would be interested in speaking with me in more detail, about work-life balance and other areas of your life. If you would like to participate, please fill in the link, and it will automatically return to me, indicating your interest in an interview.

Are you forced to take part?

No, this is completely voluntary. It is up to you to decide whether you can spare time to fill out the survey questionnaire.

Will your organisation see the answers to your survey?

No, your organisation will only see a summary of the research findings, and they will not see any specific information regarding who took part, and what their responses were. All names and identities of people who participate in the surveys will be anonymous, in line with adherence to research ethics.

What will happen if you take part in the research?

When you return the survey, all the information given will be consolidated with information from other participants' responses. If you complete the link at the end of the survey, that will indicate your willingness to participate in the interviews, which I will happen. I will contact you again to invite you to take part in a confidential individual interview, about your personal experiences with juggling work, and other areas of life as a female Information and Communications Technology (ICT) professional. Discussions will be scheduled to last about an hour and will take place at a mutually agreed on convenient time.

What will the collected information be used for?

This survey is part of my Ph.D. studentship. The information from the surveys and interviews will be studied, the findings will be used as part of my fulfilment towards attaining a Ph.D., will also be published in academic journals, and if called upon be presented to academics and policy makers.

Is the information provided by you as a participant, going to be kept confidential?

Yes, it will, and this is in adherence to research ethics. Your name or any other information that may identify you will not be used, so that your identity remains anonymous. At the University of Kwa Zulu-Natal only my Supervisor and I will have access to the surveys and related documents. Be assured that the data you provide will be treated in the strictest

confidence and will only be utilised for academic research purposes. Your anonymity is guaranteed, and no reference to any respondents will be made within the research report. I look forward to your favourable consideration with regards to participating in the online surveys, and your completed survey responses at your earliest convenience.

Need more information?

If you have any questions about the study, or would like more information, please feel free to contact me:

Direct line: 0824866808

E-mail: masterwiza2000@yahoo.com
217076380@stu.ukzn.ac.za

Address: University of KwaZulu-Natal,
College of Law and Management Studies,
School of Management, Information Technology and Governance,
Private Bag X01 Scottsville,
Pietermaritzburg 3209,
South Africa.

If you would like to talk to my promotor of my research to raise any concerns, please contact Dr. Ashika Maharaj

Phone: +27 31 260 8182

E-mail: maharajash@ukzn.ac.za

Office: M-Block-M1-309

Address: University of KwaZulu-Natal,
College of Law and Management Studies,
School of Management, Information Technology and Governance,
University Road, Westville
Postal Address: Private Bag X54001,
Durban,
4000
South Africa.

PLEASE DO NOT FORGET:

If you are interested in taking part in an individual interview about the issues covered in the survey, at the end there is a link you may click on to indicate your voluntary willingness to participate in the interviews. This is an important part of the study, so I urge you to please consider taking part.

Example: Please click on the link below to indicate your voluntary willingness to take part in the interviews: <http://goo.gl/forms/SMJ2afQBdYudtywO2>

This online survey is completely anonymous and will take about 15 to 25 minutes to complete. Before you continue to the survey, please review the online consent form.

TERMS OF PARTICIPATION: I understand this project is an academic research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I reserve the right to withdraw my consent at any time, as I am not bound by a contract of any kind. I can stop participating at any time without explanation, penalty, or loss of benefits, or academic standing, to which I may otherwise be entitled. I verify that by clicking to the next page it is confirmation that I have read, and understood this consent form, and willingly agree to participate in this study under the terms described.

Please print and keep a copy of this page for your records and for future reference. If you have any concerns during the process, please contact the researcher.

Email Invitation



College of Law and Management Studies,
School of Management, Information Technology and Governance,
Private Bag X01 Scottsville,
Pietermaritzburg 3209,
South Africa.

E-mail: masterwiza2000@yahoo.com
217076380@stu.ukzn.ac.za

To whom it may Concern

RE: PERMISSION TO CONDUCT RESEARCH

My introduction

I am a Ph.D. student registered with University of KwaZulu-Natal, Pietermaritzburg Campus, South Africa. I am currently (2017) conducting an empirical study.

What is this study about?

The study is: Work-life balance: A case of female information and communication technology professionals at a telecommunications company. I would like to invite you to participate in an online survey. Within the context of this study, various elements of Work life behaviours in terms of experiences and the Information and Communications Technology (ICT) profession will be of interest. It is anticipated that this study will provide critical insight into the work-life balance of females in a male-dominated sector like Information and Communications Technology (ICT).

Why your views are important for this study?

I am sending this survey to only ICT female employees and 8 males within your department in order to find out the experiences of female (ICT) professionals. In this study the purpose is to learn about the various experiences of female (ICT) professionals. Whilst taking part is unlikely to directly benefit you as respondents of this study, it is hoped that taking part in this study will help other people in the future identify important elements that would help female (ICT) professionals in the Information and Communications Technology (ICT) profession. Once I am done with the research and if you are interested in the findings of this study, I can send you a summary once it is completed so that you see where you and your organisation are in terms of work-life balance issues.

What do you have to do?

This will be a google drive-based survey and if you would like to take part, please complete the survey by clicking on the link that will be provided. The survey is short and straight forward and should take you at least 20-25 minutes to complete. At the end of the survey, there is another link asking whether you would like to talk to me in more detail about work-life balance and other areas of your life. If you would like to take part, please fill in the link and it will automatically return to me indicating your interest in an interview.

Are you forced to take part?

No, this is completely voluntary. It is up to you to decide whether to take time on filling out the survey.

Will your organisation see the answers to your survey?

No. Your organisation will only see a summary of the research findings and they will not see any specific information regarding who takes part and what they say. All names and identities of people who return surveys will be anonymous in adhering to research ethics.

What will happen if you take part in the research?

If you return the survey, I will look at the information you give me and combine it with the information from other people's surveys. If you complete the link at the end of the survey that indicates your willing participation in the interviews which I hope you will, I will contact you again to invite you to take part in a confidential individual interview about your personal experiences of juggling work and other areas of life as a female Information and Communications Technology (ICT) professional. Discussions will last about an hour and will take place at a mutually agreed upon convenient time.

What will the collected information be used for?

This survey is part of my Ph.D. studentship. The information from the surveys and interviews will be studied and the findings will be used as part of my fulfilment towards attaining a Ph.D. and will also be published in academic journals and if called upon be presented to academics and policy makers.

Is the information you as a participant going to provide going to be kept confidential?

Yes, it will, and this is in adherence to research ethics. Your name nor any information that may identify you will be used, so that you remain anonymous. Only my promotor and I at the University of Kwa Zulu-Natal will have access to the surveys and related documents. The data you provide will be treated in the strictest confidence and will only be utilised for academic research purposes. Your anonymity is guaranteed and no reference to any respondent will be made within the research report.

I look forward to your favourable consideration with regards to participating in the online surveys and your completed survey response at your earliest convenience.

Need more information?

If you have any questions about the study, or would like more information, please feel free to contact me:

Direct line: 0824866808

E-mail: masterwiza2000@yahoo.com
217076380@stu.ukzn.ac.za

Address: University of KwaZulu-Natal,
College of Law and Management Studies,
School of Management, Information Technology and Governance,
Private Bag X01 Scottsville,
Pietermaritzburg 3209,
South Africa.

If you would like to talk to my promotor of my research to raise any concerns, please contact Dr. Ashika Maharaj

Phone: +27 31 260 8182

E-mail: maharajash@ukzn.ac.za

Office: M-Block-M1-309

Address: University of KwaZulu-Natal,
College of Law and Management Studies,
School of Management, Information Technology and Governance,
University Road, Westville
Postal Address: Private Bag X54001,
Durban,
4000
South Africa.

PLEASE DO NOT FORGET:

If you'd be interested in taking part in an individual interview about the issues covered in the survey, at the end there is a link you may click on to indicate your voluntary willingness to take in the interviews. This is an important part of the study so please do consider taking part.

Example: Please click on the link to indicate your voluntary willingness to take part in the interviews: <http://goo.gl/forms/SMJ2afQBdYudtywO2>

This online survey is completely anonymous and will take about 15 to 25 minutes to complete. Before you continue to the survey, please review the online consent form.

TERMS OF PARTICIPATION: I understand this project is an academic research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time as I am not bound by a contract of any kind. I can stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled. I verify that by clicking to the next page that I have read, and I understood this consent form, and willingly agree to participate in this study under the terms described.

Please print and keep a copy of this page for your records and for future reference. If you have any concerns during the process, please contact the researcher.
--

**APPENDIX D: AMENDED FINAL WORK-LIFE BALANCE STUDY EMPLOYEE
ON-LINE SURVEY**

WORK-LIFE BALANCE STUDY EMPLOYEE SURVEY

Demographics

Dear Madam,

I wish to introduce myself (Mr. W. Munyeka) as a Ph.D. scholar pursuing a research on the work-life balance of women ICT employees in your organisation. In this context, I kindly request you to spare some time to answer this survey. I look forward your support and co-operation to enable me in the successful completion of my research. The information provided will be strictly applied to academic propose only. Please answer as true fully as possible and where an expansion of your answer is required, kindly substantiate.

SECTION A

1. AGE GROUP

20-30 years	31-40 years	41-50 years	51 or more
1	2	3	4

2. RACIAL GROUPING

Black	White	Indian	Mixed-race	Other	Do not wish to answer
1	2	3	4	5	6

3. MARITAL STATUS

Single	Married	Divorced	Co-habiting not married	Other (the category of not wanting to disclose or part-time co-habiting)
1	2	3	4	5

4. SPOUSE/ PARTNERS' EMPLOYMENT STATUS IF APPLICABLE

Full-Time	Part-Time	Not Employed	Does not apply
1	2	3	4

5. EDUCATIONAL LEVEL

Certificate	Diploma	Degree	Post-Graduate degree
1	2	3	4

6. DEPARTMENTAL SECTION UNDER WHICH EMPLOYEES WORK

ICT Section	IT Section	ICT auxiliary services
-------------	------------	------------------------

1	2	3

7. NUMBER OF YEARS WORKED FOR IN THE ORGANISATION

less than 6 months	6 months to a year	2 to 5 years	6 to 10 years	11 to 20 years.
1	2	3	4	5

8. WORKING HOURS

40 Hours/ week	41 - 50 hours/ week	51 - 60 hours/week	61 -70 hours/week	70 hours or more
1	2	3	4	5

9. PROFESSIONAL PROFILES

CLASSIFICATIONS OF JOBS		PLEASE INDICATE
Operations specialist	1	
Senior data management manager	2	
Junior ICT Technician	3	
Systems technician	4	
ICT Technician	5	
Data base network administrator	6	

SECTION B

WORK-RELATED QUESTIONS

Below are several statements that might be useful to describe work-related questions as they apply to work-life balance. Please indicate the level of to which you associate with each of the statements as they relate to work.

(Key: 1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never).

Before answering the question, indicate yes/no if you are aware of the Work-life balance benefits available through your organisation.

1. Are you aware of the Work-life balance benefits available through your organisation?

1	Yes	
2	No	

		Always	Frequently	Sometimes	Seldom	Never
Work-life balance	1.1. If a work-life balance policy exists, are the employees are expected to adhere to and sign the policy?	1	2	3	4	5
	1.2. Do you use any of the family-friendly benefits available through your organisation?	1	2	3	4	5
	1.3. Policy communication in the organisation a work-life balance policy has been established documented and well communicated.	1	2	3	4	5
	1.4. Do you feel knowledge of the work-life balance policy interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare?					
Gender stereotypes	1.5. Do you feel treated fairly as a female ICT professional in the workplace given you are operating in a male-dominated industry?	1	2	3	4	5
	1.6. Do you feel you are given less tasks because you are a female?	1	2	3	4	5
Flexibility	1.7. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry?	1	2	3	4	5
	1.8. Do you feel flexible work arrangements negatively affect chances for promotion?	1	2	3	4	5

SECTION C

LIFE-RELATED QUESTIONS

Below are several statements that might be useful to describe work-related questions as they apply to work-life balance. Please indicate the level of to which you associate with each of the statements as they relate to life.

(Key: 1= Always, 2=Frequently, 3=Sometimes, 4= Seldom, 5=Never).

Before answering the question, indicate yes/no if you are you assist in the care of dependent

adults/ children (e.g., older or disabled relatives or toddlers).

2.1. Do you assist in the care of dependent adults/ children (e.g., older or disabled relatives)?

1	Yes	
2	No	

		Always	Frequently	Sometimes	Seldom	Never
Dependent adults /children-related tasks	2.1. Do you care for dependent adults/children?	1	2	3	4	5
	2.2. Do you feel you spend enough time taking care of dependent adults/children?	1	2	3	4	4
Work/home interference	2.3. Do you feel that your work/ career interferes with your responsibilities such as at home, yard work, cooking, cleaning, repairs, shopping, paying the bills, or childcare?	1	2	3	4	5
	2.4. Do you feel that your work/ career keeps you from spending the amount of time that you would like to spend with your family?	1	2	3	4	5
	2.5. Do you feel that your work/ career Interferes with your home life?	1	2	3	4	5
Time management	2.6. Do you feel you are afforded flexibility in the workplace as a female in the ICT industry?	1	2	3	4	5
	2.7. Do you feel you manage your time effectively and efficiently?	1	2	3	4	5

	2.8. Do you as a female ICT professional feel you balance your life between work and domestic chores?	1	2	3	4	5
Sense of accomplishment	2.9. Do you feel that your work/ career provides you with a sense of accomplishment and this helps me be a better friend or family member?	1	2	3	4	5
	2.10. Do you feel that your work/ career does not provide you with a sense of accomplishment and this helps me be a better friend or family member?	1	2	3	4	5
Skills acquisition	2.11. What makes you feel you can be a better friend and family member through your work/career?	1	2	3	4	5
	2.12. What makes you feel you cannot be a better friend and family member through your work/career?	1	2	3	4	5

Thank you for your time and participation

Please follow the link to complete the survey

<http://goo.gl/forms/SMJ2afQBdYudtywO2>

APPENDIX E: NON-SIGNIFICANT FINDINGS

ANOVA: Working schedules, working features, work on non-standard days/times at Telkom and categories of racial grouping

ANOVA			
		<i>F</i>	<i>p</i>
(Component 1: Working schedules at Telkom)			
Workweek	Between Groups	2.32	.052
Flexible Working Hours	Between Groups	1.19	.417
Reduced Workweek	Between Groups	1.81	.567
Hours of Work	Between Groups	1.89	.879
Meal Intervals	Between Groups	2.43	.542
(Component 2: Working features at Telkom)			
Working from Home (full-time/ part time) or Working Closer to Home	Between Groups	1.09	.067
Shift work	Between Groups	1.49	.055
Overtime	Between Groups	2.00	.081
Changing Shift Schedules	Between Groups	2.12	.062
Call-out (T421) Workweek	Between Groups	1.60	.069
(Component 3: Work on non-standard days at Telkom)			
Work on Sundays	Between Groups	1.99	.061
Work on Public Holidays	Between Groups	2.01	.089
Overtime for Management and Specialist Levels	Between Groups	1.81	.052

Results of Pearson’s product-moment correlation coefficient and Section B: Work-related scale

		Pearson Correlation	<i>p</i>	<i>N</i>
Partner/spouse’s employment status	Existence of WLB and adherence	.760	.020	50
	Usage of any family-related	.719	.010	50
	Policy establishment documentation and communication	.709	.040	50
	Policy interference	-.368**	.006	50
Educational level	Existence of WLB and adherence	.848	.003	50
	Usage of any family-related	.702	.040	50
	Policy establishment documentation and communication	.811	.004	50
	Policy interference	.701	.003	50
Number of years worked for in the organisation	Existence of WLB and adherence	.781	.043	50
	Usage of any family-related	.739	.013	50
	Policy establishment documentation and communication	.888	.045	50
	Policy interference	.779	.029	50
Working hours	Existence of WLB and adherence	.619	.022	50
	Usage of available family-related	.700	.049	50
	Policy establishment documentation and communication	.781	.019	50
	Policy interference	.761	.009	50
Work departments	Existence of WLB and adherence	.812	.038	50
	Usage of any family-related	.711	.029	50
	Policy establishment documentation and communication	.819	.047	50
	Policy interference	.739	.014	50

APPENDIX F: INTERVIEW INFORMED CONSENT FORM AND INTERVIEW SCHEDULE

Thank you for indicating your participation in an interview after completing the initial online questionnaire. For this final part of data collection, the researcher will now conduct interviews based on my study.

Research objectives

The study is: **Work-life Balance: A Case of Female Information and Communication Technology Professionals at a Telecommunications Company.**

Within the context of this study, various elements of Work life behaviours in terms of experiences of ICT female professionals at work as well as home, the Information and Communications Technology (ICT) in terms of the nature of the sector in terms of globalisation and internet will be of interest. It is anticipated that this study will provide critical insight into the work life balance of females in a male-dominated sector like Information and Communications Technology (ICT).

Some notes with regards the interview schedule

This interview schedule covers several themes to achieve its goals and objectives: Work-life balance, experiences Information and Communication and Technology environment and Internet. As you will soon discover, some of these themes are covered under specific sections and others throughout the interview.

Whilst the interview schedule contains some very specific questions, the character of the interview is to be as open ended and non-leading as possible, to avoid bias and this will be done focusing on the research objectives and aims. It is likely that participants will touch on some areas when answering questions, and this is encouraged, because the objective of this research is to understand as much as possible, the experiences of female Information and Communications Technology professionals. Where possible, the researcher will make deeper reviews in order to gain a better understanding of exactly what the individuals mean. In some areas, such as the work section, the researcher will use very specific questions in order to explore and understand specific experiences, opinions etc. In other questions regarding relaxation for example, the researcher will be a lot more general as he anticipates that participants' experiences will vary from one participant to another. In this specific section, the researcher anticipates to draw more on what the interviewee says, then lead the interview from there.

The interview will take about 30 minutes. The interview will be recorded via an audio recorder and written notes. All responses in the interview will be kept strictly confidential and only used for academic purposes.

Biographical Information:

Name of participant: _____

Date of interview: _____

Age: _____ Race: _____

Qualifications: _____

Thank you for your cooperation.

Yours sincerely,

Mr. Wiza Munyeka.

SECTION A: ALL WORK-RELATED QUESTIONS

1. *How would you define your work-life?*
2. *Do you have a work-life that represents you?*
3. *What is the boundary between your work and personal lives?*
4. *Do you think your work life has limitations?*
5. *How has your work life changed over time?*
6. *Do you find it hard to manage time in terms of work tasks, given the nature of your work?*
7. *Do you think you will stay in your job, in the foreseeable future, given it's a male-dominated field?*
8. *How do your male counter parts treat you in this male-dominated field?*

SECTION B: ALL HOME-RELATED QUESTIONS

1. *How would you define your personal/home life?*
2. *In what ways does your personal/family life represent you?*
3. *What is the boundary between your home and work lives?*
4. *Do you think your personal/home life has limitations?*
5. *How has your personal/home life changed over time?*
6. *What do you do when you get home from work?*
7. *What do you do during the weekend?*
8. *In your household, how is the work divided; please answer under the following guides as it applies to you: house cleaning, laundry, cooking, taking care of the elderly/other family members, and bathing the young children?*
9. *Do you find it hard to manage time in terms of home chores, given the nature of your work?*
10. *Has working with ICT and internet made your personal life easy or complicated?*

SECTION C: ALL HOME-RELATED QUESTIONS

1. *When you hear the phrase 'work-life balance' what does it make you think about?*
2. *As you go through everyday life, how do you manage your career and your personal life?*
3. *Do you think your organisation is doing enough to level the field for women in terms of Work-life Balance?*
4. *Do you believe in an ideal/perfect balance in life? Kindly explain.*
5. *Do you believe that a long-term balance is possible between personal life, professional life and career?*
6. *Do you think you have a balance between your personal life and your professional life?*
7. *Is your company or your manager flexible about your labour time, its arrangement and the place where you are working?*

APPENDIX G: LETTER FROM THE EDITOR

LUSEBE ENTERPRISE

98 Bendor Drive,
Bendor,
Polokwane 0699,
South Africa.

Contact : +27786759896
Email: lucymconsult@gmail.com

24/11/2020

TO : WHOM IT MAY CONCERN

RE : Dissertation for Mr. Wiza Munyeka for PHD thesis, student No. 217076380.

Title of project: Work-life Balance: A case of female Information and Communication
Technology professionals at a Telecommunications
Organisation.

This serves to confirm that intensive academic editing and proofreading was carried out on the
thesis, to enhance the quality of the dissertation.

Nature of editing: make sure the study is well written, it is clear and concise, is of an acceptable
linguistic standard, the presentation is professional, all this without altering the original vision,
content, and meaning of the research.

Suggestions included changes to sentence construction, flow, expression, redundancies, spelling
and grammar, and page numbering.

Lucy Musiyiwa.

FREELANCE EDITOR/AUTHOR/CONSULTANT

APPENDIX H: TURNITIN REPORT

Final PhD thesis

ORIGINALITY REPORT

10%	8%	3%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.pub.nf.ca Internet Source	<1 %
2	www.soc.umn.edu Internet Source	<1 %
3	eige.europa.eu Internet Source	<1 %
4	www.ellipsis.co.za Internet Source	<1 %
5	www.futureknowledgework.com Internet Source	<1 %
6	rning.blogs.nytimes.com Internet Source	<1 %
7	embla5.com Internet Source	<1 %
8	gas.sagepub.com Internet Source	<1 %
9	ist.psu.edu Internet Source	<1 %