

UNIVERSITY OF KWAZULU-NATAL

**EXPLORING WORKPLACE ENVIRONMENTAL FACTORS  
AFFECTING FEMALE ACADEMICS' PSYCHOLOGICAL  
RESILIENCE: A MIXED METHODS SEQUENTIAL EXPLANATORY  
STUDY**

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School of Management, Information Technology, and Governance

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## CANDIDATE DECLARATION

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“God, grant me the serenity to accept the things I cannot change;  
courage to change the things I can; and wisdom to know the difference”.

(Reinhold Niebuhr)

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## **DEDICATION**

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## ABSTRACT

A review of the relevant extant literature suggested that Higher Education Institutions [HEIs] are heavily dependent on the psychological resilience [PR] of academic staff members to achieve excellence in teaching and learning. However, there is a dearth of research that focuses specifically on the PR of female academics [FAs] in the context of workplace environmental factors [WEFs] in South African HEIs. In response, this study was conducted to identify some of the most prevalent WEFs-related adversities that may put FAs at risk for high levels of negative mental health outcomes [NMHOs], and the fundamental building blocks of psychological resilience [BBPRs] that FAs may exhibit in response to WEFs-related NMHOs.

A mixed method sequential explanatory approach within the pragmatism paradigm was applied in this study. Through this approach, a sample of 135 FAs was drawn from the University of KwaZulu-Natal [UKZN] to participate in the dominant quantitative phase. Of the 135 FAs, 27 FAs were purposefully selected to participate in the follow-up qualitative phase. Informed consent was obtained from all FAs/participants prior to participation in this study. The quantitative and qualitative data were collected using online self-report surveys and in-depth/semi-structured interviews respectively; and subsequently analysed using Stata and Thematic Analysis, respectively.

Primarily, the results of the study indicated that administrative demands and skewed workloads; research demands; teaching demands; and compensation and rewards were reported as the highest WEFs causing NMHOs. However, knowledge, skill, and ability [KSAs]; coaching support; professional and personal networking; and mentoring support were ranked as the lowest WEFs causing NMHOs. Generally, as a group, while participants reported having positive experiences towards the BBPRs [i.e., neuroticism, mindfulness, self-efficacy, and coping]; the majority of participants expressed experiencing high levels of NMHOs [i.e., stress, burnout, depression, anxiety, and compassion fatigue]. Overall, this study concluded that the PR of FAs depended crucially on individual factors [i.e., demographic characteristics] and work-related factors [i.e., support from the university management and human resource management [HRM]]. The conceptual, theoretical, methodological, and empirical

contributions made by this study are discussed; limitations and delimitations are acknowledged; and recommendations for UKZN management and HRM, and future research are proposed.

**Keywords:** Psychological Resilience [PR], Workplace Environmental Factors [WEFs], Female Academics [FAs], Negative Mental Health Outcomes [NMHOs], Building Blocks of Psychological Resilience [BBPRs], Higher Education Institutions [HEIs], Management, Human Resources Management [HRM], University of KwaZulu-Natal [UKZN], South Africa

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

BBPRs	Building Blocks of Psychological Resilience
CD-RISC	Connor-Davidson Resilience Scale
EI	Emotional Intelligence
FAs	Female Academics
HEIs	Higher Education Institutions
HRM	Human Resource Management
KSAs	Knowledge, Skill, and Ability
NMHOs	Negative Mental Health Outcomes
PMHOs	Positive Mental Health Outcomes
P	Participant
PU	Productivity Units
PR	Psychological Resilience
SA	South Africa
UK	United Kingdom
UKZN	University of KwaZulu-Natal
USA	United States of America
WEFs	Workplace Environmental Factors

# **CHAPTER ONE**

## **THESIS INTRODUCTION**

### **1.1. INTRODUCTION**

This study sets out to demonstrate that work-related adversity has the potential to hinder psychological resilience [PR]. It does so by exploring the workplace environmental factors [WEFs] that adversely affect the PR of female academics [FAs] in South African Higher Education Institutions [HEIs], with a particular focus on the University of KwaZulu-Natal [UKZN]. The prevailing notion that “adversity can make people stronger or more resilient”, assumes that the work of FAs in HEIs is straightforward and requires little supporting structures and resilience building resources to promote and sustain their resilience in the workplace environment (American Heart Association, 2017; Crane & Searle, 2016; King et al., 2016). The available literature suggests that FAs in South African HEIs may perceive or experience PR negatively due to the socially-constructed role of gender which may carry over into their workplace environment and place them at risk of developing negative mental health outcomes [NMHOs] (Council on Higher Education, 2016b; Higher Education South Africa, 2014; Maphalala & Mpofo, 2017). A better understanding of the extent to which WEFs can negatively affect the PR of FAs could help HEIs introduce policies and interventions that can yield more positive mental health outcomes [PMHOs] and thereby lead to more positive experiences of PR among FAs in HEIs environments (Johnson & Lester, 2022). This introductory chapter thus provides context to the overarching aim of the study by describing the purpose of this study, along with the research questions and objectives, statement and background of the research problem, the rationale for conducting the study, and the significance of the study. The chapter concludes with a brief overview of the structure of the thesis.

### **1.2. PURPOSE, RESEARCH QUESTIONS, AND OBJECTIVES OF THE STUDY**

The purpose of this study was to explore WEFs affecting FAs’ PR at the UKZN in South Africa. A mixed method sequential explanatory design was employed to explore the potential negative effects that WEFs have on FAs’ PR. This involved the sequential use of both quantitative and qualitative methods, also described as phase-one and phase-two of the study.

The quantitative research questions were developed to ascertain levels of resilience, WEF-related NMHOs, NMHOs and BBPRs. A further aim of phase-one was to explore any potential relationships between the main research variables/concepts explored in the study and participants' demographic characteristics. For example: participants' age, race,<sup>1</sup> relationship status, number of children, level of qualification, tenure within the industry and the institution, appointment designation, employment contract, and home college at the institution. The follow-up qualitative research questions in phase-two of the study were developed to explore and explain how participants experienced the salient self-reported levels of resilience, WEFs-related NMHOs, NMHOs and BBPRs in phase-one, and thereby gain the participants' insights and perspectives into how participants felt about the role of the human resources management in supporting their resilience at work.

### **1.2.1. Research Questions**

#### **1.2.1.1. Quantitative Phase [Phase-One] Questions**

The first phase of the study focused on the following five research questions:

- i. What is the general perceived level of psychological resilience among female academics in the context of their workplace environments?
- ii. What workplace environmental factors do female academics identify as the highest contributors of their experiences of negative mental health outcomes?
- iii. To what extent do female academics experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors?
- iv. To what extent do female academics experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?

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<sup>1</sup> The racial descriptive categories used in this thesis are consistent with the South African official categorisation of race, and these are: Black, White, Indian, and Coloured.

- v. What possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?

#### 1.2.1.2. Qualitative Phase [Phase-Two] Questions

The second phase of the study focused on the following two research questions:

- i. How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?
- ii. How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?

#### 1.2.2. Research Objectives

As noted in section 1.2, the overall aim of this study was to explore WEFs affecting FAs' PR at the University of KwaZulu-Natal, South Africa. To achieve this aim, the study was guided by the following specific objectives.

##### 1.2.2.1. Quantitative Phase [Phase-One] Objectives

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.

- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

#### 1.2.2.2. Qualitative Phase [Phase-Two] Objectives

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

### 1.3. STATEMENT AND BACKGROUND OF THE RESEARCH PROBLEM

NMHOs, specifically: distress, anxiety, burnout, depression, and compassion fatigue are prevalent in South African HEIs, with FAs being exposed to several WEFs-related NMHOs experiences (Bezuidenhout & Cilliers, 2010; Draper-Clarke, 2020; Du Plessis, 2020; Mayer & Surtee, 2015; Poalses & Bezuidenhout, 2018; Wolhuter et al., 2013). Workplace environmental factors can be described as those internal and/or external factors that can either promote or hinder the PR of people in a workplace environment setting. These are factors that can result in either NMHOs or positive mental health outcomes [PMHOs<sup>2</sup>] affecting the individual's resilience capacity either negatively or positively. The prevalent adversities of

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<sup>2</sup> PMHOs include [and are not limited to] experiences that contribute to energy, enthusiasm, equanimity, eustress, compassion satisfaction.

WEFs are contributing to higher levels of NMHOs<sup>3</sup> and negative experiences of PR in FAs (Garcia-Rivera et al., 2022; Johnson & Lester, 2022; Shin & Jung, 2013). Such WEFs-related NMHOs and resilience as phenomena have been researched in various workplace environmental contexts or occupational settings and the HEIs is no exception. However, compared to developed countries, such as Germany, France, the United Kingdom (UK), the United States of America (USA), and Japan, there is a paucity of research into the levels of self-reported WEFs-related NMHOs among FAs within the South African context of HEIs.

The academic profession, not unlike other service-oriented professions, is inherently demanding, making academics vulnerable to adverse psychological outcomes. It is the study of PR that seeks to explain how certain factors impact psychological and mental health in different populations. However, within the South African context there is limited knowledge on the PR of academics in general, and FAs in particular. Due to the rapid global and local developments in the higher education sector, various WEFs<sup>4</sup> have emerged as high contributors to the increasing levels of negative experiences of resilience for FAs in academia (Cabero & Epifanio, 2021; Gabryelska, 2021; Paewai et al., 2007; Portnoi, 2015). This study was set against the background context of promoting the PR of women in academia through Human Resources Management [HRM] interventions.

When FAs experience NMHOs, not only can these negative outcomes have dire implications to FAs' overall mental health and wellbeing, but they can also impact negatively on their work institution's bottom line and current strategic plan. More recently, various South African quantitative, qualitative, and mixed method researchers have investigated potential reasons why women experience higher NMHOs at both academic and non-academic workplaces (Awung & Dorasamy, 2015; Cadete, 2017; Callaghan, 2015; Cornelissen, 2016; Portnoi, 2015). These researchers have found that working women increasingly find themselves experiencing low levels of resilience, not necessarily because they did not self-identify with key individual attributes that indicated resiliency, but because they felt they were exposed to constant external risk factors in the workplace environment. It is suggested that adverse

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<sup>3</sup> NMHOs include [and are not limited to] experiences that contribute to burnout, depression, anxiety, distress, compassion fatigue.

<sup>4</sup> See chapter two of this study.

experiences can sometimes possess the ability to retain or sustain resilience – an almost impossible task for some individuals (Awung & Dorasamy, 2015; Cadete, 2017; Callaghan, 2015; Cornelissen, 2016; Portnoi, 2015). According to Yonezwa et al. (2011: 916 cited in Cornelissen 2016: 163), given that constant exposure to WEFs-related adversity inevitably leads to a decline in resilience, it might be unrealistic to expect FAs to be always resilient, especially where it is clear that work adversities exceed resilience capacity.

Studies increasingly find empirical evidence of the positive relationship between resilience and workplace support, indicating that WEF-related NMHOs are not the only main challenges FAs face at the workplace. Researchers increasingly argue that FAs also face the risk of NMHOs stemming from ineffective employee management practices in the workplace. For instance, researchers tend to suggest that FAs might be limited in terms of having an input into managerial decision-making at the workplace, which may result in negative work-life experiences (Boateng, 2018; Budhwar & Debrah, 2003; Chitsamatanga et al., 2018; King et al., 2016; Mayer & Surtee, 2015; Pinnington et al., 2007).

Resilience researchers believe that resilience of employees, whether in academia or not, should become an organisational effort to support resilience of employees, protect mental health, and influence the realisation of organisational objectives (Bezuidenhout & Cilliers, 2010; Cadete, 2017; Rees et al., 2015; Rehman et al., 2021; Selesho & Naile, 2014). The HRM scholars Rowley and Jackson (2011: xxvi) remind us that people are an organisation's most-valued asset, who individually and collectively contribute to the achievement of the organisational objectives through their assigned work. Given that the causes of NMHOs relate to work life, it is not surprising that researchers are increasingly raising questions on the role of workplaces to address work-related adversities that contribute to serious NMHOs and actively promote PR such that the employees will be more likely to sustain more positive levels of resilience. This appears to be an increasing trend in the literature of resilience at work particularly following the Covid-19 pandemic outbreak which exposed many of the challenges that FAs face both in the workplace environment and home environment (Cabero & Epifanio, 2021; Ferreira et al., 2020; Marsay, 2020; Sougou et al., 2022). To clarify this potential issue, it was important to raise the question of the role of university management and HRM practitioners in effectively and efficiently addressing the resilience concerns of FAs in the context of this study. As

indicated in sub-section 1.2.1, to elicit contextual information about how the participants perceived and experienced the role of HRM in relation to their lived experiences of WEFs-related NMHOs and resilience, this important question was included in the qualitative phase [follow-up/phase-two] of the study. In other words, it was important to consider the possibility that FAs' experiences of WEFs-related NMHOs and resilience HEIs were also potentially related to their university's management and HRM practitioners' efforts to promoting a stress-free workplace environment. Evidence from more recent studies highlight the importance of regularly developing new and/or changing existing workplace resilience policies and practices to reflect the fact that FAs are still more likely to experience higher levels of WEFs-related NMHOs than male academics because of the gender bias in society which is carried over in workplace policies and practices (Chitsamatanga et al., 2018; King et al., 2016; Rees et al., 2015; Sadiq et al., 2019). While there is generally an expectation that individuals will take responsibility for their experiences of resilience, research has established that that individual resilience can be fostered through the provision of workplace support because of certain factors in the workplace generate issues that are beyond the control of individuals (King et al., 2016). Various studies have found that supporting PR of employees, helps reduce or prevent NMHOs and increase or sustain PMHOs (Bezuidenhout & Cilliers, 2010; Rees et al., 2015; Shrivastava & Desousa, 2016). Indeed, more recently, HRM researchers and practitioners' researchers have concluded that "organisations can develop resilient behaviour among employees by possessing or implementing a unique set of strategic human resources management practices" (Rehman et al., 2021: 11). Ultimately, it is against this backdrop that the current study was aimed to contribute towards.

#### **1.4. RATIONALE OF THE STUDY**

In terms of the rationale or the reasons why this study was undertaken, there is growing evidence in the South African literature that FAs in South African HEIs are faced with several workplace environmental adversities which contribute to high levels of NMHOs. In the light of the above, and the dearth of empirical data about resilience in the context of FAs in South African HEIs, exploring/understanding what/how WEFs are likely to negatively affect FAs' experiences of resilience has been identified as a work of immense importance to undertake. In addition to WEFs-related NMHOs, also demographic characteristics and perceived workplace support are known to play a role in the students' FAs' experiences of resilience.

The underlying theoretical framework of this study is the social construction of gender theory [as discussed in chapter two]. This theory was chosen for this study because the existing literature reveals that FAs in South African HEIs are still grappling with WEFs-related NMHOs (Maphalala & Mpofu, 2017; North et al., 2011; Sadiq et al., 2019; Subbaye & Dhunpath, 2016; Williams, 2017). Specifically, this theory places emphasis on the need to understand how FAs construct meaning about the impact of WEFs on their PR. There was a need therefore, to explore and unpack the potential WEFs that affect FAs PR within the gender context, if any meaningful PR interventions or outcomes from this study were to be advocated. Internationally, there is growing interest in the processes by which resilience can be attributed to psychological, biological, social, and environmental factors. This is not surprising, considering the insightful value of PR in addressing the adverse consequences of stress in the personal and professional lives of individuals (Back et al., 2016; Bandura, 2006; Broekman, 2011; Rees et al., 2015; Woods-Giscombe & Black, 2010). Psychological resilience is not merely about one's ability to survive or recover from experienced adverse events, misfortune, or change (Garcia-Dia et al., 2013). Of great importance is that PR also plays a key role influencing a more positive self-appraisal of one's internal resources and ability to respond to potential adversities or demands of one's job (Fletcher & Sarkar, 2013).

This suggests that the theme of FAs' PR and their response to workplace environmental factors [WEFs] is of relevance to the HRM discipline. Based on the review of literature at a primary level, demanding experiences at work undermine resilience in FAs (Broekman, 2011; Salimzadeh, 2017). Importantly, if FAs are unable to respond positively to stressful encounters, negative emotional experiences could compromise their psychological wellbeing (Montpetit & Tiberio, 2016; Rees et al., 2015; Slišković & Maslić Seršić, 2011). Research has clearly and repeatedly demonstrated that women and men in service-oriented industries equate both NMHOs and PR differently (Hogan, 2015; Prozesky, 2008; Slišković & Maslić Seršić, 2011; White & Machado-Taylor, 2016). There are complex circumstances that lead women to be drawn into a pattern of stress, burnout, fatigue, and depression. The tendency of women to become more involved than men in household duties, childcare, and family obligations, is a dominant force behind women's experiences of PR (African Development Bank Group, 2015; Cadete, 2017; McKinsey & Company, 2016; Mrčela & Ignjatović, 2013; Turbine & Riach, 2012). Another key contributor to adverse experiences in FAs has to do with the vast amounts

of skewed/managerial work which they perform. As a result, teaching, research, and institutional undertakings become a maelstrom of stress for female academics attempting to move into senior positions (Clarke et al., 2015; Slišković & Maslić Seršić, 2011).

The tendency for individuals to experience negative emotions is common in professions that require substantial interaction with other people (Gabryelska, 2021; Pipe et al., 2012; Rickinson, 2011; Zhang, 2021). As such, the term emotional labour is generally used in this study to describe the process of dealing with stress in academia. In fact, how FAs respond to stressful student/teaching-related factors is a good indicator of their ability to demonstrate PR in many academic endeavours (Clarke et al., 2015; Hermanowicz, 2016; Rickinson, 2011). Concerning WEFs, there are growing evidence that PR is strengthened or diminished by a range of WEFs within the workplace (Clarke et al., 2015; Maodzwa-Taruvunga & Divala, 2014; Wolhuter et al., 2013). Hence, this study offers a relatively unique opportunity to directly assess the potential WEFs affecting the PR of FAs. Conducting this research sets a benchmark for other researchers exploring WEFs and PR in academia. Of greatest importance is that effectively synthesising potential WEFs, assists in addressing contextual academic challenges through HRM methods and practices.

## **1.5. METHODOLOGY AND RESEARCH SETTING**

In terms of the methodological background of the study, this is mixed methods study with a sequential explanatory design, undertaken between 2018 and 2021 in the School of Management, Information Technology and Governance of the University of KwaZulu-Natal in South Africa, KwaZulu-Natal, Durban, South Africa. The population for this study consisted of FAs across UKZN's four [4] colleges namely Humanities, Agriculture, Engineering and Science, Health Sciences, and Law and Management Studies. A total of 135 FAs responded to the online survey/questionnaire in phase-one of the study and total of 27 FAs who met the follow-up phase participation criteria were interviewed in phase-two of the study. For the purposes of this present study, the researcher assigned the letter P, to indicate participant, followed by a number [between 1 and 27] to represent the numerical code assigned to each of the study's participants interviewed in phase-two of the study.

## **1.6. SIGNIFICANCE OF THE STUDY**

This study has theoretical, conceptual, and empirical significance. Given the significance of mental health in any domain of life, many studies are increasingly being conducted about resilience in the context of the workplace environment. The term resilience refers to “the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state” (Shrivastava & Desousa, 2016: 38). Although it is well known that adversities can result in positive outcomes of resilience [i.e., PMHOs], exposure to certain adverse WEFs might result in serious negative factors of resilience [i.e., NMHOs]. While the South African literature clearly demonstrates that WEFs-related adversities are potential contributors to NMHOs that academics face over the years, they offer little empirical evidence on academics’ resilience in the context of WEFs-related adversities.

This study identified eight major WEFs as contributing factors to FAs negative experiences of resilience. These WEFs are teaching demands; research demands; administrative demands and skewed workloads; knowledge, skill, and ability [KSAs]; professional & personal networking; coaching support; mentoring support; and compensation & rewards. Academic professionals, particularly FAs in the context of South African HEIs, remain an understudied population in terms of the potential effects of WEFs-related NMHOs on their resilience.

The present study adopts a novel methodological approach to explore and explain the potential negative impact of WEFs upon FAs’ PR. Specifically, the researcher took a pragmatic stance to conduct this study, which allowed her to choose the mixed method sequential explanatory design as the most suitable approach to explore the research problem and potential solutions to the problem (Åkerblad et al., 2021; Creswell & Creswell, 2018; Hands, 2022; Salkind, 2017). Thus, in conducting this study and answering the research questions, this study attempts to yield further insights into how potential WEFs-related PMHOs can be fostered. Given the limitation of literature in the context of SA’s HEIs, it is possible that this study will be regarded as a potential benchmark for future research exploring key WEFs that might contribute to either positive or negative experiences of resilience for FAs in the context of HEIs. Hence, in terms of the theoretical significance/benefits, this study will add to the literature base and body of knowledge that have focused on the resilience of FAs by providing a proposed conceptual

framework based on the literature reviewed and the findings emerging from this study, to help illustrate the potential factors associated with resilience of FAs.

In terms of methodological significance/benefits, this study developed a self-rated data collection instrument for the purposes of collecting quantitative data in phase-one of this study. It consists of the 12 demographics factors; 25 items from the Connor-Davidson Resilience Scale [CD-RISC] (Connor & Davidson, 2003); 8 WEFs identified in the literature; 4 BBPRs and 5 NMHOs [as per the model of resilience used in this study (Rees et al., 2015)]. The CD-RISC scale items were adapted slightly to emphasise the study's participants' resilience experiences within the context of the UKZN's workplace environment. This study further contributes to a novel qualitative interview topic guide/schedule used in the follow-up/phase-two of this study. The interview guide/schedule was designed to help explain the quantitative results from phase-one and explore whether participants' self-reported levels WEFs-related NMHOs were due in part to their perceptions and experiences of lack of resilience support from the university management and HRM. It is expected that this study may provide readers with a deep meaning of the research problem by employing a mixed method sequential explanatory design which builds on strengths of both quantitative and qualitative approaches. This may encourage future research work to undertake research on the subject using a similar methodology, methods, and techniques.

There is growing recognition of the value of South African academic professionals in generating and disseminating knowledge for the sake of HEIs and for advancing positive social-economic benefits in developing counties (Council on Higher Education, 2016b; Clarke et al., 2015; Hermanowicz, 2016; Marshall & Morris, 2011; Rickinson, 2011; Scott, 2006). On this basis, this study also offers a fresh impetus to the pivotal role that South African HEIs' might play to supporting positive experiences of PR in FAs with South African HEIs. Therefore, the findings from this mixed method study can be of vital importance to influence the development and implementation of HEIs policies that foster positive resilience experiences by preventing and reducing WEFs-related NMHOs experiences. These considerations have significance for the disciplines of human resources management, biology, psychology, sociology, and gender studies. Based on the findings of this research study, the final chapter of this thesis makes recommendations for current and prospective FAs at UKZN

and other HEIs, UKZN management personnel and HRM, as well as future researchers and policy makers.

## **1.7. STRUCTURE AND OVERVIEW OF THE THESIS CHAPTERS**

This section outlines the overall structure of the thesis. As illustrated in Figure 1.1, the thesis consists of the following nine chapters:

**Chapter One: Introduction.** This chapter provides a general overview of aim and purpose of the research study, outlining the research problem and background, rationale for the study, research questions and research objectives, and significance of the study, and general information regarding the structure of the thesis.

**Chapter Two: Exploring Adverse Workplace Environmental Factors in the Context of Higher Education Institutions.** This chapter reviews the literature on WEFs to capture most worrisome issues around WEFs as they relate to the negative experiences of the PR of FAs in South African HEIs. It uses the social constructionism theory as the theoretical framework to explore and explain the extent to which such negative experiences are influenced by social constructions of gender. The types of WEFs discussed in the chapter are: teaching demands, research demands, administrative demands & skewed workloads, knowledge, skill, and ability [KSAS], professional & personal networking, coaching support, mentoring support, compensation & rewards

**Chapter Three: An Overview of the Theory of Psychological Resilience.** This chapter provides an overview of the theory of PR in the light of the previous chapter. It delves into the trajectory of resilience research as evidenced in the works of pioneers in the field of resilience. In reviewing literature on PR, the work of Rees et al. (2015) on individual psychological resilience in the healthcare workplace context is relevant. It emphasises the role of mental health in the workplace and informs types of NMHOs that can be experienced by people in potentially adverse workplace environments. The NMHOs discussed in this chapter that are deemed applicable to workplace environment

settings such as HEIs are: burnout, depression, anxiety, stress, compassion fatigue. The chapter also discusses the issue of work-life balance in relation to women in academia.

**Chapter Four: The Biopsychosocial Perspective of Resilience: A Theoretical Model to Promote Resilience Among Female Academics.** This chapter builds on the literature reviewed in chapter three to present/outline Rees et al. (2015)'s model of individual workforce resilience, as the theoretical framework underpinning the study. The authors advocated a biopsychosocial [biological, psychological, and social] approach to explore and explain resilience in different workplace environmental settings because the experience of clinical problems [i.e., NMHOs] have multiple interacting causes and contributing factors [i.e., biopsychosocial factors] regardless of what the person's workplace environment is. The authors proposed a resilience model with four essential biopsychosocial factors of resilience [or BBPRs] namely neuroticism, mindfulness, self-efficacy, and coping. These constructs are discussed in detail in chapter four from a South African HEIs context, exploring how these concepts [and other resilience related concepts] relate to FAs' experiences of resilience. The chapter also highlights the important role of HEIs' management and HRM in ensuring that experiences of WEFs-related NMHOs in FAs are prevented or reduced by means of establishing resilience-specific policies and interventions.

**Chapter Five: Research Methodology and Methods.** This chapter restates the aim, research questions and research objectives of the study, and examines the methodological design and process adopted to attain them. It outlines the application and implications of using a mixed method sequential explanatory design in this study within the framework of pragmatism to explore the research questions and elicit deeper insights of PR of FAs. It describes the outcome of the pilot study conducted prior to the main data collection process, and describes the methods and techniques adopted to determine the sample size of this study's target population. This includes explaining the methodological steps taken to design and implement the two-phased data collection and analysis process [which commenced by collecting quantitative online survey data in phase-one followed by qualitative virtual individual interviews in phase-two] and explaining how integration of quantitative data and qualitative data occurred in this

study. The final section of the chapter outlines the ethical considerations and principles applied throughout the study.

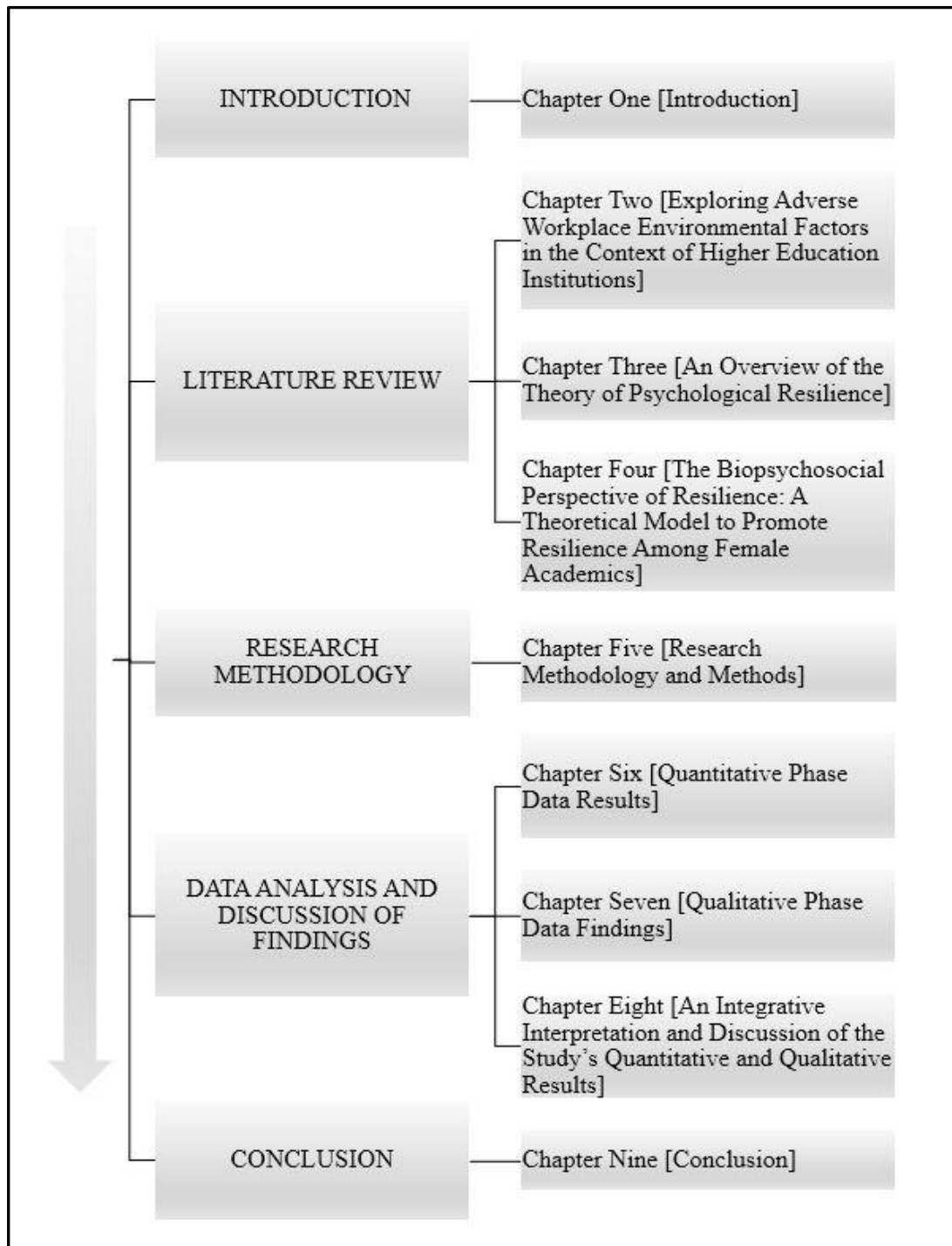
**Chapter Six: Quantitative Phase Data Results.** This chapter presents the data results for the quantitative research questions explored in the phase-one of this study, following the analysis process which used the STATA statistical software package data. The chapter reports on the salient self-reported levels of resilience, WEFs-related NMHOs, NMHOs and BBPRs in the sample of this study. The chapter further reports on potential relationships between the primary variables of concern in the study and the demographic characteristics or employment profile of this study's sample.

**Chapter Seven: Qualitative Phase Data Findings.** This chapter presents the findings of the thematically analysed interview data for the qualitative research questions explored in the follow-up or phase-two of the study. The chapter provides context to the quantitative data reported in chapter six and describe/explain participants' self-reported levels of WEFs-related NMHOs. Furthermore, the chapter reports participants' explanations of their self-reported levels of BBPRs and participants' views on how UKZN management and HRM might contribute to their positive experiences of resilience [BBPRs].

**Chapter Eight: An Integrative Interpretation and Discussion of the Study's Quantitative and Qualitative Results.** This chapter interprets and discusses the overall mixed methods data on WEFs' affecting FAs' PR. It integrates the quantitative and qualitative data findings throughout the discussion chapter to offer richer insights and more meaningful answers to the study's research questions. Based on the findings emerging from this study, the chapter concludes with a discussion of a proposed conceptual framework for exploring resilience in the context of FAs.

**Chapter Nine: Conclusion.** This final chapter provides a conclusion to the study. It begins by providing a detailed discussion of the three significant contributions made by this study about WEFs' affecting FAs' PR as well as the practical implications arising from the study. The chapter then outlines the extent to which the research questions

were answered and research objectives achieved in the study. The limitations and delimitations related to this study are also acknowledged next. The chapter concludes by highlighting potential recommendations for UKZN's management and HRM and future research on the subject.



**Figure 1.1. Overview of the Thesis Chapters**

## **1.8 CHAPTER SUMMARY**

This chapter described the overall aim underpinning this study: to explore WEFs affecting FAs' PR, and presented the reasoning behind the need to undertake this study. In particular, the chapter described the research questions and objectives designed to attain the central aim/purpose of the study. Furthermore, the chapter presented and provided a background to the research problem, followed by laying out the rationale for conducting the study, and underlining the significance of the study. Finally, the structure of the thesis chapters was laid out in the last section of the chapter. The next three chapters: two, three, and four, discuss the literature reviewed relative to the subject of WEFs affecting FAs' PR.

## **CHAPTER TWO**

### **EXPLORING ADVERSE WORKPLACE ENVIRONMENTAL FACTORS IN THE CONTEXT OF HIGHER EDUCATION INSTITUTIONS**

#### **2.1. INTRODUCTION**

The previous chapter provided a brief introduction to this study outlining the overarching goal and rationale for conducting this study on workplace environmental factors [WEFs] affecting female academics [FAs]. Workplace environmental factors in South African Higher Education Institutions [HEIs] can contribute to a number of adverse psychological states that FAs at the University of KwaZulu-Natal can encounter. Some of the commonly known forms of adverse psychological states include: burnout, depression, anxiety, and stress; all of which can result from negative experiences at work. The purpose of this chapter is to identify and discuss some of the critical WEFs that can potentially contribute to these adverse states in women in HEIs. The review of literature on WEFs, documents the urgent need to address the concerns of mental health and resilience of women within academia.

The chapter attempts to highlight how WEFs have been shaped by gendered ideologies of work in academia, since FAs compared to male academics may be more likely to report negative experiences. Accordingly, this chapter will explore the literature on potential WEFs within HEIs that may negatively affect the PR of FAs, both globally, and from the South African context.

The chapter begins by analysing the concepts of social constructionism, followed by the social construction of gender; offering some key insights into how gendered societal expectations have permeated the environment of HEIs in South Africa. This is followed by an in-depth review of the literature on eight potential WEFs, highlighting how these factors affect the resilience of FAs. The factors examined are:

- i. Teaching demands;
- ii. Research demands;
- iii. Administrative demands and skewed workloads;
- iv. Knowledge, skill, and ability [KSAs];

- v. Professional and personal networking;
- vi. Coaching support;
- vii. Mentoring support;
- viii. Compensation & rewards.

## **2.2. SOCIAL CONSTRUCTIONISM THEORY: CONSTRUCTIONS OF WEFS IN HEIS**

An increasing number of scholars of resilience theory support the notion that human resilience as a social phenomenon can be approached and studied from different multidisciplinary perspectives (Broekman, 2011; Cadete, 2017; Clarke et al., 2015; Robertson et al., 2015; Southwick et al., 2014). Before considering the impact that WEFs have on the PR of FAs, it is necessary to describe the theory of social constructionism underpinning this study.

Traditionally, social phenomena [i.e., PR] is assessed by looking inside the person [psychology]. For example, by hypothesising the existence of attitudes, motivations, and cognitions. Social phenomena have also been measured through social structures [sociology], such as the economy, or some of the major institutions such as marriage and the family (Burr, 2003). From the perspective of social constructionism, Burr (2003) posited the notion that neither the individual psyche [psychology], nor social structures [sociology], provide the sole means to fully explore and understand social phenomena. For Burr (2003), social phenomena are social constructions which manifest through the iterative process that takes place routinely between people in society.

Social construction[ism] is essentially, the creation of objective knowledge, which arises from the subjective experiences and interaction among individuals within society (Galbin, 2014). This assertion, therefore, includes factors such as objectivity and subjectivity of human experience of reality. The definition implies that FAs who might experience WEFs-related adversities are experiencing social phenomena. Simply put, social constructs within HEIs can take the form of WEFs to which academics in that environment tacitly or explicitly attach meaning to. For example, the amounts of time allocated to teaching and research, and service/administrative (Clarke et al., 2015; Paewai et al., 2007; Poyner, 2016; Tight, 2010). Extending this view, it can be assumed that adverse WEFs in HEIs is a potential social

construction that emerges through the interaction between FAs, their co-workers, managers, and others individuals; thus, shaping the resilience experiences of FAs. Furthermore, according to Ackoff (1991 cited in Paewai et al., 2007: 385), “a problem [i.e., an adversity] is an abstraction or social construction”. Thus, the social constructionism theory fits well with the psychological resilience research that emphasises the role of institutions to enable social conditions whereby women and men can experience social/societal factors [such as WEFs] in a positive light.

### **2.2.1. Gender as a Social Construct**

Described as a state of being male or female (De Cecco & Elia, 1993), gender has long been used to establish social and cultural differences of roles and responsibilities that men and women occupy in society (Andermann, 2010; De Cecco & Elia, 1993). In general, gender can be a complex but important subject to investigate regarding resilience in the corporate world. In line with the social constructionism theory, new assumptions have emerged, regarding differences between women and men in society and their roles in the workplace (Andermann, 2010; Kouta et al., 2017; Wenzlaff et al., 2018).

According to Shung-King et al. (2018: 3) gender refers to “the socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for males, females, and other genders – affects how people live, work, and relate to each other at all levels, including in relation to the health system”. Studying resilience from the perspective of the social construction of gender helps recognise the ‘gendered’ dynamics within a given society. Studies around the perceived ‘gendered’ patterns of behaviour in the workplace became popular in the wake of feminist movements and related interventions. Many researchers of feminist theories hold the view that in examining issues around gender at work, it is possible to challenge and minimise the work-life concerns of women at work (Cadete, 2017; Galbin, 2014; Kinnear & Ortlepp, 2016; Mrčela & Ignjatović, 2013; Toffoletti & Starr, 2016). Research on gender should strive to not only promote positive experiences for both men and women in the workplace, but to promote equality of roles outside the workplace environment for both women and men.

As De Cecco and Elia (1993) can argue, gender is treated as a social construction in that the conception of masculinity and femininity, which is generally attached to a person's biological gender make-up, reflects the several differences between female and male in their work-life expectations. For example, when certain work roles, such as administrative workloads or household workloads, are categorised as women responsibilities, the outcome shows significant differences in employment, social status, and benefits between working women and working men. For example, women have long been [and continue to be] characterised as people being the caretakers of the house, who nurture the children, cook, and clean; with men being characterised as the workhorses, who provide income, protection, and lead the family (Council on Higher Education, 2016b; Gorska et al., 2021; Ioannidou et al., 2019; Savigny, 2014; Sougou et al., 2022; Van Veelen & Derks, 2021).

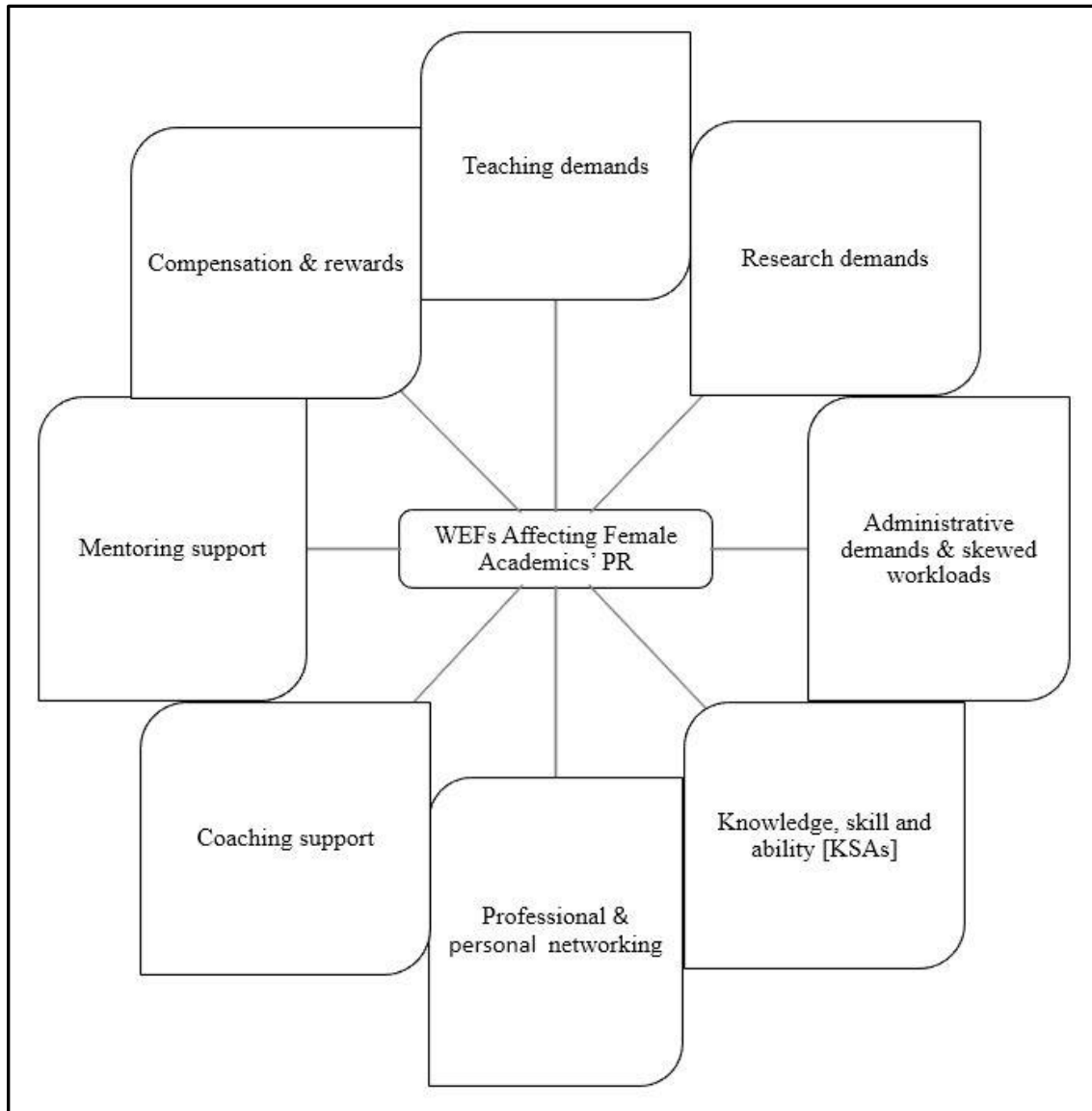
So, why is the concept of social construction of gender relevant for the current study? A workplace environment which promotes 'gendered cultural norms', enables the internalisation of misguiding social constructions of gender and assumptions, and engenders long-term beliefs that disadvantage women both within the workplace environment and outside of the workplace environment (Idahosa, 2019; Weisshaar, 2017). Simply put, the social value placed on WEFs within HEIs is one of the perennial manifestations of increased levels of adversity in HEIs in recent years. This in turn has increased the need for women in academia to develop resilience capacity to manage the increased demands of academic workloads. Mayer and Surtee (2015) expand on the notion of the social construction of gender in terms of the current challenges affecting working women in the post-Apartheid era, where they claim that "South African leaders, particularly in institutions of higher education, are challenged by complex societal and educational issues, ranking from social and gender inequalities, experiences of marginalisation and the exclusion of women in leadership positions in HEIs" (2015: 612). It is thus imperative to understand how FAs at UKZN experience WEFs, and the extent to which gender is reflected in their experiences of resilience.

### **2.3. ACADEMICS' WORKPLACE ENVIRONMENTAL FACTORS ASSOCIATED WITH PSYCHOLOGICAL RESILIENCE**

While factors influencing resilience vary in dimension [for example, biological, psychological, social, environmental, and cultural factors], they typically interact with one another to

determine how a person responds to challenging or adverse situations (Poyner, 2016; Southwick et al., 2014). From the perspective of the broader physical workplace environment, a workplace environmental factor or WEF can be described as any aspect of the workplace environment, or work-life domain, perceived as having a direct impact on a person's overall health. Although the extent to which FAs at UKZN perceive WEFs to have an influence on their PR is not explicitly described in the literature, the South African HEIs literature does provide supporting research evidence on the presence of risk factors and protective factors in academia, and their relationship to the concept of resilience. For example, as a category, WEFs is either approached from a risk factor or protective factor perspective (Bezuidenhout & Cilliers, 2010; Council on Higher Education, 2016b; Idahosa, 2019; Mallak & Yildiz, 2016; Mayer & Surtee, 2015; Moodly & Toni, 2017). Risk factors can be described as those adverse events or conditions that diminish resilience when a person is exposed to various adversities; while protective factors are factors that increase resilience and protect a person from risk factors.

Clearly, it can be expected that if there is a predominance of risk factors over protective factors within academia, FAs may become more vulnerable to adverse outcomes. Precisely because the factors identified within this study are recognised to be central components to academics' health and wellbeing, these factors may be directly linked to the experiences of resilience of academics. Therefore, adversity or resilience could be one of the results of FAs' interaction with their academic workplace environment. Figure 2.1 provides an overview of the WEFs considered risk factors for negative psychological outcomes among academics. In the subsections which follow, these potential WEFs are discussed, emphasising how they affect the resilience of FAs.



**Figure 2.1. A Proposed Framework on Workplace Environment Factors affecting the Psychological Resilience of Female Academics**

### **2.3.1. WEF One: Teaching Demands**

In examining the literature on HEIs, teaching and students have regularly been identified as two overarching factors that contribute to the strenuous experiences of FAs. Academic occupations have been redesigned, with junior occupations being more teaching-focused and senior occupations being more research-focused (Bitzer, 2009; Council on Higher Education, 2016b; Cloete et al., 2015). As such, FAs' work-life experiences will differ in terms of the academic ranks they occupy. For example, junior academic positions are designed to include more teaching and administrative tasks, and less research and leadership assignments; whereas,

senior academic positions are designed to include more research and leadership tasks, and less teaching and administrative assignments (Abaza, 2021; Lesenyeho et al., 2018; Williams, 2017; Wolhuter, 2015).

Teaching is described as a core function of an academic professional (Wolhuter & Mushaandja, 2015). The purpose of the teaching function is to impart knowledge about a subject to students in a physical or virtual university classroom situation. This is important because it allows universities to provide quality teaching in the form of knowledge and skills development which can satisfy diverse market needs in society (Leibowitz et al., 2014). Teaching is reported to negatively impact the resilience of FAs at UKZN because of the large student numbers that lecturers must teach in a class. Teaching is also made difficult by the challenges of getting students from diverse backgrounds to meet the university's learning expectations within limited resources. In this context, academics are expected to be knowledgeable about different teaching methods as part of serving their teaching role expectations (Ferman, 2011; Fry et al., 2009). When measuring the best methods of delivering lectures, there is no general or single method that could be deemed more suitable for all students because students have differing learning styles and learning needs. Lecture-based and teacher-centred approaches to teaching within HEIs have traditionally been considered important (Salimzadeh, 2017; Subbaye & Dhunpath, 2016). It is suggested that a one-way method of teaching promotes an intransigent style of teaching which can lead to passive and artificial learning on the part of the students, and negative psychological outcomes in lecturers such as feelings of isolation and anxiety (Salimzadeh, 2017). Moreover, the university industry requires that universities transition from lecture-based/teacher-centred institutions to learner-centred institutions (Cloete et al., 2015; Subbaye & Dhunpath, 2016). For example, teaching and engaging younger generations of students with short attention spans, strongly demands that lecturers develop a digital approach teaching so that they can effectively impart knowledge to those students with diverse learning styles and expectations (Fry et al., 2009). This essentially means that academics need to develop creative ways of teaching, including using visual aids (Council on Higher Education, 2016b), and engaging in practical discussions of the subject matter being taught (Wolhuter, 2015). This extends the role of a lecturer beyond the immediate theory-centred learning, that promotes practical-centred learning. The outcome of this means that FAs must

be prepared with a great deal of knowledge of the material being taught, as well as having a good real-world outlook of the subject being taught.

As evidenced in the research of Poyner (2016) and Subbaye and Dhunpath (2016), prior experience in teaching is typically the strongest predictor of career advancement for new academics, and one which determines the teaching loads assigned to individuals at different levels within academia. Moreover, the social value placed on gender can also be added to the differences in the ability of women and men to achieve tenure in academia, and the teaching excess that accompanies their status (Council on Higher Education, 2016b; Love et al., 2022; Nkomo, 2015). In general, junior FAs who are mothers, are such a group that an increased work-family spill-over can often pose challenges to their career advancement. For example, a study at Stellenbosch University has shown that women at lower academic positions tended to have the highest teaching workloads, compared to women holding more senior academic positions (Williams, 2017). Given the increased participation of women in HEIs in South Africa and worldwide, it is imperative that HEIs invest in adequate teaching support for their female academic staff (Sougou et al., 2022). More precisely, the lack of teaching training and qualifications at the lower academic ranks, and women being assigned heavier teaching roles, can cause additional distress for less-experienced FAs (Reddy et al., 2016; Subbaye & Dhunpath, 2016). For example, at UKZN, Subbaye and Dhunpath (2016) proposed that early career academics spend up to 10% more of their time on teaching-related activities than the prescribed guidelines documented in the generic job descriptions for those at the rank of lecturer. Accordingly, these academics may begin experiencing negative psychological outcomes, which in turn may invite experiences of burnout if these academics lack appropriate teaching competences, and if there is no prompt support from UKZN to providing its lecturers with the necessary teaching tools. As Derek Bok, a former president of Harvard University has noted:

It's astonishing, a major failing, that the universities do not teach their future teachers. Academia is the only professional system that doesn't instruct its newcomers in how to do what they will spend most of their time doing (Cited in Reddy et al., 2016: 1820).

It has thus been argued that both academic educators, learners, and their universities would benefit immensely from the availability of teaching instruction for academics with heavier teaching roles. This makes sense because teaching students with diverse learning abilities requires good pedagogical content knowledge, but it also necessitates resilience on the part of lecturers to manage potential stresses. For example, engagements between lecturers and students have been related to fatigue among lecturers, as teaching demands of students have increased (Ferman, 2011; Moodly & Toni, 2017; Toffoletti & Starr, 2016; Zhang, 2021). That said, the academic function which includes teaching, research, and service (Smith et al., 2010), may disadvantage women and produce negative psychological outcomes when the culture of the university is gendered. For example, some women are often placed in vulnerable positions because it is normally expected that women in academia will play motherly roles to their students [and even to their colleagues] (Idahosa, 2019; Moodly & Toni, 2017; Williams, 2017).

Another key aspect of teaching found to contribute to the resilience of FAs is related to the efforts of lecturers to meet and maintain the university's expectations of them. Universities develop performance evaluations to ensure their survival in a competitive market (Seyama & Smith, 2015). Managing teaching tasks such as class assignments, tests, and examinations are an important part of the teaching process and often play an integral role during an academic's performance review. Hence, as a core function of the university, lecturers have a great responsibility to promote the interests of their university by delivering quality teaching (Leibowitz et al., 2014). In other words, there is an expectation that academics will be able to cope with the demands of teaching multiple university classes and performing other roles within their university. Whether explicit or not, teaching is potentially exhausting considering the substantial amount of time and energy invested to meet the deadlines which come with HEI teaching workloads. Moreover, although there is recognition that negative levels of resilience, for academics compared to employees in other sectors, can be influenced by increased anxiety, stress and depression around teaching work, more positive HEIs' intervention is thought to be needed to promote positive work experiences (Broekman, 2011; Clarke et al., 2015; Rickinson, 2011; Subbaye & Dhunpath, 2016). In this regard, a few researchers agreed that a perceived lack of satisfaction in teaching can be felt in the form of feelings of anger, disappointment, discouragement, frustration, and uncertainty (Ferman, 2011; Paewai et al., 2007; Scott, 2006; Subbaye & Dhunpath, 2016). Such experiences can significantly influence the extent to which

women feel motivated to enter or remain in academia. Consequently, currently employed lecturers who are limited by negative psychosocial states are likely to underperform the teaching function, and risk the university's efforts to attain institutional objectives.

Implicit in the concept of teaching within the context of HEIs is the term “academic autonomy” (King & Bunce, 2020). Recent research (Stromquist, 2017 cited in Lesenyeho et al., 2018: 3) has suggested that “being allowed to teach and conduct research within their niche areas of interest, with all the required flexibility” is a key factor that attracts early academics to South African HEIs. Lesenyeho et al. (2018: 3) refers to autonomy as “the opportunity to be able to make decisions and implement them with little or no interference by authorities”. Broadly speaking, academic autonomy is an important tool for increasing the capacity of lecturers to provide quality teaching to their students, while generating positive teaching outcomes for the university (Ferman, 2011; Lesenyeho et al., 2018).

Social support is also an integral part of the role of university lecturers (Fletcher & Sarkar, 2013; Innstrand & Grodal, 2021), which is linked to the concept of academic autonomy. This means that the ability to disseminate knowledge to individuals with diverse backgrounds, needs, and expectations, may require more than formal academic qualifications and the ability of lecturers to demonstrate suitable social skills (Ferman, 2011; Lesenyeho et al., 2018). The ability of lecturers to undertake the teaching role effectively leads to increased feelings of satisfaction, which in turn leads to the reduced turnover of lecturers within academia. As will be seen in the next sections, and later in the following chapter, a positive sense of autonomy encourages self-supporting resilience behaviours to address unfavourable WEFs such as research output pressures.

### **2.3.2. WEF Two: Research Demands**

While the previous section has described the key notions of the effects of teaching and students, this section explores aspects of the research-related work that might contribute to the negative experiences of resilience for FAs. Due to the increased participation of women in South African HEIs, FAs have a significant impact on the teaching and research excellence of their universities. In principle, these factors have increased the need for women in academia to

develop resilience attributes, to actively contribute towards teaching and research excellence for their universities.

The importance of scientific research as part of the work of an academic professional, may lie in how research productivity is described. Research workload or productivity is the ability to generate research output and has been broadly defined as “comprising research publications in scientific journals, academic books and conference proceedings; gathering and analysing original evidence; obtaining competitive research grants; carrying out editorial duties; obtaining patents and licenses; and producing monographs and papers presented at professional meetings” (Creswell, 1985: 24 cited in Cloete et al., 2015: 112). Clearly, the pressures within the research function present barriers to female academic’s career mobility for completing increased academic research workloads.

While the descriptions of research work are designed to have a direct impact on the university’s outcomes, there are a range of risk factors that stand in the way of FAs’ ability to increase research outputs. For example, the lack of time and of research expertise appears to be two key pressing problems preventing FAs to increase their research outputs (Wolhuter et al., 2013). Firstly, to generate research outputs within a dynamic environment such as academia, means that academics must have time to cogitate in order to increase the number of research outputs. Secondly, academics must have expertise in their research fields in order to bring greater efficiency, and generate more meaningful research outputs. These factors are common because a positive research profile has become the quality benchmark for career advancement within academia (Council on Higher Education, 2016b; Ferman, 2011; Toffoletti & Starr, 2016).

Another consideration, is whether research output is expressed in the form of quantity or quality (Weisshaar, 2017). The pressure of research productivity is not always seen in a positive light, because the success in completing a Master’s or PhD’s dissertation/thesis as part of an academic degree/qualification, does not equate to research work expertise (Archer, 2017; Cloete et al., 2015; Ferman, 2011; Igiri et al., 2021; Sa et al., 2020; Uwizeye et al., 2021). While academics in general may have the ability to increase their research work outputs [quantity], their ability to provide depths of information [quality], contribute to new

knowledge, and meet the publications requirements of research journals, may be limited. Therefore, the ability to produce research work output, depends on the quality time and expertise that FAs must have to generate good quality/increased research outputs. These factors are so critical that research studies abound with regards to the correlation between research publication outputs and the well-being of academics (Council on Higher Education, 2016b; Cloete et al., 2015; Sa et al., 2020; Toffoletti & Starr, 2016; Uwizeye et al., 2021; Williams, 2017; Wolhuter et al., 2013; Yang et al., 2021). The difficulty of juggling between various paid and non-paid work implies that FAs must find alternative ways to carry out their research.

Some researchers claim that certain academic fields of study such as Women's Studies, tends to be a preferable platform for many women in academia to submit research work for publication as it reflects upon their experience as women (Turbine & Riach, 2012; Williams, 2017). By so doing, FAs fulfil their research output demands and maintain their research productivity profile. The field of Women's Studies also known known as Gender Studies is sometimes criticised for encouraging feminist education which may promote the political interests of scholars involved in feminist-related studies. Despite this criticism, it is evident that although gender-oriented research fields have made research publications from FAs more possible, it may also have added to the pressure that FAs experience towards being recognised for their expert knowledge. On the other hand, although women's research contributions under the rubric of Women's Studies is rising, there is still a general belief that Women's Studies lack scientific contributions, resulting in loss of confidence, marginalisation, and discouragement for FAs to pursue gender research studies (Prozesky, 2008; Savigny, 2014). This places the interests and expectations of FAs regarding their research publications at odds with the interests and expectations of their universities.

In the process of research production, the scholar is engaging in contributing to the betterment of society. In such a way, criticisms may be ironic because the common assumption, according to Savigny (2014), is that gender research is not only about women, but about promoting a more equal society where both men and women can benefit. In addition, a more holistic approach to studying the unresolved issues that women face, might be achieved where researchers are women who may resonate with the gender subjects they investigate. If

women's personal experiences are not noteworthy of scientific contributions, then their research interests, potential scientific contributions, and indeed their identities as women cannot be valued or recognised. Mabaso and Dlamini (2018), found that the lack of research interests diminished research output productivity, which in turn negatively affected the well-being of academic staff at the Durban University of Technology [DUT].

Research training initiatives in South African HEIs has made research interests more achievable, but has also increased the breadth of research outputs that academics are expected to perform. For example, Subbaye and Dhunpath (2016) found that despite being one of the larger research-led universities in South Africa, UKZN, and other universities fell short in terms of providing research and writing training to academic staff due to the general assumption that academics receive their research training while pursuing their doctoral degrees. It is also important to point out that research functions may require research funding, while teaching functions do not require funding (Reddy et al., 2016). This also explains why studies have shown that academic promotions are often related to research productivity, with no incentive for teaching (Love et al., 2022; Ross et al., 2022; Subbaye & Dhunpath, 2016). In other words, research-related duties may tend to be prioritised over teaching-related activities because of the perceived financial gains and career advancement associated with research productivity (Ross et al., 2022).

These dynamics of academic work raise questions about whether academics who have more interest and ambition to teach, receive enough credit from their HEIs. That said, research work pressures are more likely to be perceived by academics whose research work outputs are used as a performance indicator by their university (Council on Higher Education, 2016b; Cloete et al., 2015). If research work is regarded as a prominent career progression factor, then FAs who struggle to meet their university's research output targets, might contemplate their worth in terms of being an academic professional within HEIs. Research productivity pressures may increase one's deliberations to resign one's academic job to pursue other job prospects.

This study proposes that another major influence of generating research output is the level of qualification an academic possesses. Within the context of academic work, a postgraduate academic qualification [i.e., more specifically a Doctoral qualification] often implies exposure

to some significant form of research fieldwork, and can equate to a more satisfactory level of research expertise, rather than a lower postgraduate or undergraduate qualification [i.e., Bachelors, Honours, and Master's degree qualifications]. For example, according to Murray (2014), the progress and dynamics of the research function at UKZN is usually positive when an academic is male, possesses a PhD qualification, and works in a large school [for example, the College of Agriculture, Engineering and Science], compared to when the academic is female, holds a senior lecturer position, but does not have a PhD qualification. Because postgraduate qualifications provide the possibility for individual academics to learn and self-discover their own identity as scholars, academics who possess postgraduate qualifications are usually expected to exercise a more active research function within the university. Developing new academics through the supervision of research projects is also an important part of the function of many academics, especially those more actively involved with research roles, as opposed to teaching roles. An effective way of helping FAs mitigate stress and burnout is to support their professional and personal development. In some instances, this implies formalising/implementing resilience strategies that enable research work functions to be tailored around teaching responsibilities and vice-versa (Ross et al., 2022; Subbaye & Dhunpath, 2016). The following section discusses the administrative duties and non-core duties that may have an impact on FAs' PR.

### **2.3.3. WEF Three: Administrative Demands & Skewed Workloads**

Increasingly, women in academia find themselves necessitating to prove that they can perform and keep pace with increased demands of academic workloads. This trend is seen by some as relating to the perception that women are unable to generate substantial contribution of research work compared to men in academia (Savigny, 2014; Weisshaar, 2017). The literature suggests that academics across the board were traditionally required to perform HEIs' intensive/rote administrative workloads (Budhwar & Debrah, 2003; Council on Higher Education, 2016b; Clarke et al., 2015; Ferman, 2011; Budhwar & Debrah, 2003; Scott, 2006; Tight, 2010; Wolhuter, 2015). Only more recently has the administrative work function been attached to the work profile of an academic, and increasingly been identified in the literature as a factor that influences stress and burnout in academic staff (Clarke et al., 2015; Ferman, 2011; Tight, 2010).

With the restructuring of administrative staff in HEIs have come the expectations that FAs will engage in workloads that traditionally might not form part of their work profile. For the purposes of the current research, workloads that are largely outside the scope of work of an academic, will be referred to as skewed workloads. According to the Council on Higher Education report:

The nature of academic work has also been affected by differing models of management, particularly where academics have increasingly had to manage academic administrative departments as cost centres, and to adopt new roles and functions such as fundraising, which can detract from the traditional focus on teaching and research” (Council on Higher Education, 2016b: 302).

Ferman (2011) has highlighted three main reasons why administrative duties put academics in an unfavourable mind state. Firstly, academics, may find it demotivating to engage with administrative work. Secondly, intellectual work is inevitably neglected when academics spend large amounts of time performing routine administrative work. Thirdly, administration-heavy working conditions are at odds with conceptualisations of academics’ work as a profession. In other words, as a profession, academic occupations are generally conceptualised in terms of complex intellectual work; and performing routine administrative tasks is not regarded as performing complex intellectual tasks. An important finding from the Council on Higher Education report of 2016, is that the increase in administrative workloads within academia is influenced by the increasing demands that the South African Government places on the universities with respect to developmental goals (Council on Higher Education, 2016b). The UKZN is no exception since it is a public HEIs, and as such is expected to make positive contributions towards South African socio-economic goals. For example, UKZN is tasked with developing doctors, teachers, engineers, and other professionals who can provide effective lasting solutions to the many socio-economic challenges of the country (Council on Higher Education, 2016b).

What has not yet been sufficiently debated in the academic literature is the large amount of time, both in terms of paid and unpaid time, academic professionals spend to meet their academic work objectives. Therefore, for the purposes of this study, ‘skewed workloads’ in HEIs refers to academic workloads that extend far beyond the university’s timetabling systems.

For FAs, this may translate into failing to spend quality time with family, colleagues, and friends. Thus, administrative functions, along with skewed workloads in current university contexts are two factors that are likely to impact negatively on FAs' wellbeing, as the increased administrative work and increased skewed workloads for FAs may mean that FAs will spend more time performing those activities and less time engaging in the intellectual activities of teaching and research.

Through constitutional changes in favour of gender equity in South Africa post-1994, significant policies which respect gender at work have increased over the years (Council on Higher Education, 2016b; Cloete et al., 2015; Wolhuter, 2015). However, the discussion of gender equity within South Africa HEIs remains significant since the issues of glass-ceiling is still problematic for FAs, due in part to HEIs' inability to adopt and support employment equity advancement practices to allow qualified women to advance upward the university's senior positions (Booyesen & Nkomo, 2010; Mayer & Surtee, 2015; Moodly, 2015).

As has been discussed earlier, the ability to complete core academic work [i.e., teaching and research] successfully, require a raft of intellectual capacity for knowledge generation (Smith et al., 2010). In theory, academic work involves cognitive, affective, and social processes, all of which can demand time commitments from academics towards work-life, so as to positively influence the quality of the work produced/generated (Bandura, 2006; Rowley & Jackson, 2011). In practice, FAs may find themselves performing their academic activities beyond measure, resulting in FAs working unpaid hours, and even taking much of their work home. The workloads that this study describes as skewed workloads is well documented in the contemporary academic literature and wider resilience literature as key contributors of unfavourable mental health conditions in academic professionals (Clarke et al., 2015; Coetzee, Maree, & Smit, 2019; Lesenyeho et al., 2018; Paewai et al., 2007). The academic literature recognises, that academics usually take their work home to meet staggered deadlines. Although academia is known for its work-from-home flexibility, some researchers point out that it is not unusual for FAs to report a decreased sense of coherence and job satisfaction because of the increased lecturer-student ratios, the increased demand for research outputs, exhausting interpersonal relationships with students, and escalating administrative duties (Bezuidenhout & Cilliers, 2010).

In summary, administrative functions and skewed workloads [especially those tasks or duties which can be stressful and mentally demanding], have an ill effect on academics' physical and emotional health, their work-life, and family-life relationships, and can result in serious mental health issues for FAs. Serious mental illness increases with unhealthy stress (Bezuidenhout & Cilliers, 2010; Broekman, 2011; Cadete, 2017; Rickinson, 2011; Tight, 2010), and unhealthy stress in turn has been linked to neuroticism (Cadete, 2017; Rees et al., 2015). For this reason, it is important to establish/invest in realistic work systems and practices that effectively monitor the level of administrative/skewed workloads to be performed and can prevent serious adverse health issues. What follows is a discussion of the academic work-related knowledge, skills and abilities required by FAs.

#### **2.3.4. WEF Four: Knowledge, Skill, and Ability [KSAs]**

In terms of psychological resilience, a perceived negative or positive workplace environment is supported by a person's competencies. Measured against the financial, physical and information [i.e., knowledge] resources; human resources is regarded as a significant asset of an organisation as long as organisations continue to recognise their value towards influencing the bottom line (Smit et al., 2007). It is clear in the broader workplace literature that an organisation's employees, are essential proponents for delivering the products and services provided by their organisations to add to the bottom line of the organisation. In the context of HEIs, and more specifically academic staff, such products and services include among other things, teaching, research, and service work (Clark et al., 2014; Smith et al., 2010; Wolhuter & Mushaandja, 2015). Competencies refer to a person's knowledge, skill, and ability that enable successful job performance within their fields. In this regard, when organisations speak about an employee's job specification, not only do they refer to the work experiences of employees, but also to the so-called KSAs or knowledge, skill, and ability of employees [i.e., competencies]. In many respects, KSAs can be regarded as important indicators of a female academic's sense of resilience gained through her prior experiences of adversity in academia.

It is considered that KSAs adds to the underlying causes of many presenting challenges in academia today that affect female academics' well-being at work. A wider definition of KSAs is that of Belcourt et al. (2013: 89), which captures the expectation that academics must deliver on the core mission of the university at the highest possible level (Cloete et al., 2015).

Knowledge is the body of information, usually of a factual, or procedural nature, that allows an individual to perform a task successfully. Skill is the individual's level of proficiency or competency in performing a specific task; which is typically expressed in numerical terms. Ability is a more general, enduring trait or capacity an individual possesses at the time when he or she first begins to perform a task (Belcourt et al., 2013: 89). In the current context of HEIs, it is assumed that the underlying cause of many current challenges faced by academics today is related to the lack of KSAs facilities within HEIs.

The concept known as knowledge can be classified into two categories namely: explicit knowledge and tacit knowledge (Jamshidi et al., 2018). Explicit knowledge is usually common-sense knowledge or knowledge which is easy to articulate and share among individuals. It is about 'what' [for example, formal workplace policies, reports, and announcements]. Tacit knowledge is individualistic and is usually a product of personal or professional experience. It is about 'how' [for example, applying methods to complete teaching and research work]. Furthermore, it is difficult to transfer tacit knowledge from one individual to another because it is knowledge formed based on practice and experience (Jamshidi et al., 2018). Compared to explicit knowledge, tacit knowledge, is found to be the most important type of knowledge, because it is hidden in the mind of the individual and reveals itself when activated by an external stimulus (Buckley, 2012). Buckley (2012) proposed that tacit knowledge can be made explicit [and therefore be transferable], by promoting the sharing of knowledge among individuals.

Irrespective of how much knowledge a person may have obtained through a qualification such as degree, it is highly improbable that she or he will successfully perform tasks if he or she cannot apply the gained knowledge in the work context. Typically, skills are exclusive, practical, or manual, and relate to an individual's job proficiency (Jamshidi et al., 2018). In this sense, a person's competencies are groups of skills that can be applied at different levels of the job. After acquiring knowledge and skills, an individual should have the competencies available to apply such knowledge and skills in the right contexts. Ultimately, an employee's ability consists of the knowledge and skills that an employee has internalised, and to what extent such knowledge and skills influence positive or negative resilience. When an individual does not have the ability to apply several knowledge and skills simultaneously, they will likely

be unable to perform the different tasks required in a job. These might result in poor work performance, leaving an individual vulnerable to experiencing increased work-related stress.

Various scholars have suggested that an increased employee turnover rate is associated with a strong absence of well-trained employees (Ismail et al., 2012; Mabaso & Dlamini, 2018; Poyner, 2016; Robbins & Judge, 2013). When individuals leave their workplaces because of lack of work competencies, this can be an indication of negative work experiences [for example: stress, depression, anxiety] influenced by a reduced level of perceived employability. In many instances, the lack of KSAs or competencies, can be equated to role ambiguity, which in turn translates into reduced performance of organisational goals. With the increased need to demonstrate inclusion in academia (Innstrand & Grodal, 2021), integration and development of women in South African universities, university institutions must constantly address the causes of a perceived lack of KSAs and role ambiguity through regular ability enhancement initiatives (Idahosa, 2019). That way, FAs may be empowered with the ability to control how they respond to adverse work experiences.

In line with the above, it is clearly recognised by human resources researchers that work institutions like HEIs have play a fundamental role in academic workforce ability related to their work (Cloete et al., 2015; Du Plessis, 2020; Rehman et al., 2021; Smit et al., 2007). According to Smit et al. (2007), in a workplace environment, individuals should generally demonstrate two broad types of ability. The first type relates to the ability to perform actions intelligently, think conceptually, and react to the world around the individual [i.e., intellectual capacity]; while the second regards the ability to demonstrate stamina, coordination, and strength [i.e., physical ability]. Unlike other occupations [which might require minimal formal education], the academic occupation requires higher formal education, so that people show complex intellectual capacity to perform often challenging and intellectually sophisticated research/teaching work. Despite the widely recognised importance of intellectual capacity in an academic's work life, there is growing evidence that high levels of physical ability offer positive coping benefits for academics (Council on Higher Education, 2016a; Jamshidi et al., 2018; Robbins & Judge, 2013; Smit et al., 2007). Thus, factors such as formal academic qualifications may not entirely capture the KSAs' levels required to meet the expectations of certain academic designations/ranks (Jamshidi et al., 2018). Furthermore, it is pointed out that

the positive interaction between an academic's knowledge, skills and abilities is strongly influenced by exposure to specialised teacher/researcher training, ongoing professional development, and years of academic work practice (Abaza, 2021; Ferman, 2011; Hodgson, 2017; Sefotho, 2018).

Considering the above, it would be reasonable to assume that KSAs is an important feature of PR in the context of being an academic in HEIs. The importance of KSAs for a FAs' PR is further illustrated by Napoleon Hill's axiom: "Knowledge is only potential power. It becomes power only when, and if, it is organised into definite plans of action, and directed to a definite end" (Hill, 1960). The term 'power' in this adage could also be equated to the idea of overall competencies. While obtaining knowledge about subjects can be an easy task for academics, HEIs are more interested in how academics apply such knowledge to produce results. The lack of knowledge application is one of the perennial manifestations of workplace distress. Since work output in the form of knowledge production HEIs is commonly dependent on continuing professional development, it is expected for HEIs to support their staff in the attainment of key competencies to sustain their teaching and research roles. Higher Education Institutions may also help academic employees to increase their ability to apply knowledge. For example, professional training and development can be implemented so that explicit knowledge is converted into tacit knowledge (Jamshidi et al., 2018).

Today, HEIs use a variety of channels to provide information to individuals about the set of KSAs needed by individuals in a particular professional occupation. The job specification, with which HEIs announce academic work placements, has an undoubted value in drawing attention to required KSA of a particular academic occupation. A systematic review study of job descriptions or announcements by Kang and Ritzhaupt (2015) highlighted general work-related KSAs statements in the field of instructional design and technology [educational technology] within three types of organisations or institutions [University/College Districts; Business & Industry; and Government/Military].<sup>5</sup> The list of KSAs illustrated in Appendix H, is multidisciplinary, and presents characteristics of competencies impacting on academics' work-life, and therefore may also extend to different academic disciplines (Kang & Ritzhaupt,

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<sup>5</sup> See: Appendix H.

2015). The researcher was aware that academics differ in terms of types and levels of KSAs, and that it is difficult not to associate KSAs in the context of academics with PR of academics. Although it was not the aim of this study to examine which KSAs may be most suitable to specific academic work positions, the examples of KSAs presented in Appendix H serve to emphasise the meaning of ‘competencies’ in the broader context of academic work. It has been argued that higher of levels KSAs influence how well a person responds to adverse work situations (Kang & Ritzhaupt, 2015; Lesenyeho et al., 2018; Raju, 2014; Rehman et al., 2021; Segarra & Gentry, 2021). Generally therefore, when discussing KSAs as factors affecting the resilience of FAs, it is inevitable that having the necessary KSAs may have a positive effect on a FAs’ work-life.

Some scholars have emphasised that contextual factors such as job security may have contributed significantly to a wider application of KSAs in terms of career growth (Lesenyeho et al., 2018; Maphalala & Mpofu, 2017). It is important to note that a security of tenure within HEIs, does not indicate a presence of competencies. A study by Tharenou (1994) over twenty years ago indicated that in many instances where FAs possessed qualifications, publication, and research status comparable to those of their male colleagues, still experienced a much slower career mobility, even in instances where their male academic counterparts whose qualifications, publication and research status were lower than theirs. Although the existing literature shows evidence that equity of opportunities for working women in HEIs has improved, there is still a huge demand to address the issue of underrepresentation of women academics in senior academic positions in South Africa and worldwide (Maphalala & Mpofu, 2017; Toffoletti & Starr, 2016; Van Veelen & Derks, 2022; Weisshaar, 2017; Williams, 2017).

Regarding the issue of underrepresentation, the literature further alludes to the problem of ‘lack of KSAs’, in that it further promotes feelings of marginalisation for women in HEIs (Rowley & Jackson, 2011; Williams, 2017). As noted by Lesenyeho et al. (2018), and Rowley and Jackson (2011), if academics lack core work-related KSAs, it means not only compromising the quality of work produced, but wasting important resources. They emphasise that employee KSAs issues should be addressed for academics to perform in each situation, and for HEIs to thrive in the long-run. The term, ‘training and development’ refers to educational activities and strategies used in the world of work with the aim of providing employees with relevant

assets to meet the requirements and demands of their jobs (Lesenyeho et al., 2018; Robbins & Judge, 2013; Rowley & Jackson, 2011). In knowledge-oriented institutions like universities, it is often desirable that academics acquire higher levels of competencies in their specialised areas (Rowley & Jackson, 2011). Thus, as reported by the Council on Higher Education (2016b), academic qualifications and training are considered key elements to career advancement, tenure, increased autonomy, and in many instances, better rewards.

There are three fundamental reasons why promoting the competencies of FAs at the institutional level is important. Firstly, having the right KSAs may create a sense of positive self-development and progress in the context of working as an academic [for example, being a university lecturer]. According to Bandura (2006: 176) at the teacher level, a sense of efficacy contributes to academic development. Secondly, FAs may add more value to the university if they believe that they are knowledgeable or experts in their assigned roles. In other words, having the required academic work competencies along with the needed level of autonomy, may influence the work-like experiences of FAs more positively. And thirdly, and most importantly, KSAs positively impact FAs' resilience and cause them to re-appraise their approach to work-related adversities (Draper-Clarke & Edwards, 2016; Du Plessis, 2020; Folkman & Lazarus, 1988; Reich, Zautra, & Hall, 2010). These reasons emphasise the fact that HEIs play a critical role in enabling FAs' resilience KSAs to emerge and be expressed when faced adversities.

Supporting FAs' KSAs is particularly important, given that academic work is comprised by various interrelated complex activities requiring more than formal academic qualifications. In academia, it is imperative to have the right resilience knowledge to cope with the intellectual demands of the job and manage the daily work-life pressures (Moodly & Toni, 2017; Pillay, 2020; Poyner, 2016). Conceptualising psychological resilience in terms of KSAs can prove to be useful to FAs when faced with work-life challenges. For instance, the concept of mindfulness in the context of resilience is often described as a key factor in alleviating stress and promoting wellbeing in times of uncertainty (Bossi et al., 2022). For example, using mindfulness in academia, has been reported to be significant in a sample of women leaders working in South African HEIs (Mayer & Surtee, 2015). More precisely, Mayer and Surtee (2015) theorised that mindfulness is connected to self-competencies, in that mindful self-

competence includes the ability to reflect, to be emotionally competent, to contextualise, to stay balanced, understand others and to listen carefully. On the other hand, self-efficacy and coping competencies can lead to improved self-emotion regulation and self-management. As such, psychological resilience theories [examined in chapter three] may be useful in terms of FAs developing mindful competences which can provide personal support in times of distress at work.

### **2.3.5. WEF Five: Professional & Personal Networking**

Professional and personal networking [or interpersonal relationships] has been receiving much attention in the broader literature of HRM (Nkomo, 2015; Rowley & Jackson, 2011). It is evident that academics have a need to establish and maintain professional networks due, in part, to the internationalisation of academia and the increased need for academics to exchange information and contacts for professional and social purposes. Professional networking can be described as the view that working individuals deliberately engage in activities aimed at building, reinforcing, and maintaining relationships of trust with other working individuals (Schoenberger, 2014; Schulze, 2015). This could well be approached from a formal and/or informal social networking perspective, whereby individuals interact on subjects both within and outside the workplace environment. The rationale for professional networking in academia is primarily on facilitating positive exchange of ideas among academics with commonalities or differences of work-life interests. For example, typically, research-focused, and managerial-focused activities are key roles that academics at higher academic ranks perform; whereas teaching and administrative activities are roles that academics at lower academic ranks (Nkomo, 2015). It is now recognised that professional networking has the power to influence the career trajectory of academics from lower ranks to higher ranks.

Exploring the influences of professional networks to PR of FAs requires an interpretation of gender roles, concepts, and dynamics. The differences between women and men with regards to forming networks at work and beyond, are well-articulated by Holly J. Falk-Krzesinski, vice-president of global academic and research relations for the academic publisher Elsevier BV., when she avers: “men’s networks are widely dispersed, while women tend to form their professional networks in the same way that they form personal networks” (cited in

Schoenberger, 2014: 4). She helpfully adds that women's networks tend to be limited because women tend to focus on building tight connections rather than loose connections.

According to Schoenberger (2014), tighter connections are built for personal support and often involve maintaining contacts with people who know one another. Some examples of tighter connections are old friends, former colleagues inside the workplace where individuals work for, and other personal contacts such as mothers from their children's schools (Merga & Mason, 2021; Schoenberger, 2014). Loose connections, on the other hand, are built beyond personal support and involve maintaining contacts with people who might not necessarily know one another, nonetheless can provide a welcome outsider's perspective which might be more useful in the long-term work-life and career prospects of individuals (Merga & Mason, 2021; Schoenberger, 2014). Some examples of loose connections are current or former colleagues and new people in the individual's field of work that are outside the individual workplace environment (Merga & Mason, 2021; Schoenberger, 2014).

In the context of HEIs, academics are expected to work and engage with different individuals as part of their teaching and research roles. It is only rational for FAs to build and maintain professional networks that can support their academic career prospects (Casad et al., 2021; Van Veelen & Derks, 2022). Since it is assumed that building professional networks require more than forming tight connections, it is essential that FAs change their approach to building professional networks to minimise unfavourable work-related experiences. Professional networks or professional relationships are key players in any occupation or workplace context, that researchers in the field of resilience suggest that having a weak professional network of support hinders resilience in working women (Bezuidenhout & Cilliers, 2010; Cadete, 2017; Fletcher & Sarkar, 2013; Kinnear & Ortlepp, 2016; Shung-King et al., 2018). Thus, while forming and maintaining formal and informal networks may strengthen FAs' teaching, research, and administrative endeavours/KSAs within the university, having positive networks may enable FAs to endure challenging work tasks or situations.

Furthermore, the increase in competition arising from globalisation has created more work pressures for academics. With globalisation, academics at HEIs are increasingly expected to establish strong networking or interpersonal relationships (Council on Higher Education, 2016b; Clarke et al., 2015; Cloete et al., 2015; Ferman, 2011). According to Dubbelt, Rispen,

and Demerouti (2016), networking is a fundamental factor of academic work performance and engagement. From a global academic profession perspective, networks are essential for collaborative research activities, mobility exchange and curriculum improvement (Cloete et al., 2015; Lesenyeho et al., 2018; Sooryamoorthy, 2014). According to Sooryamoorthy (2014), in terms of research output productivity, “networking with collaborators helps increase productivity. Partners through their connections receive invitations to write chapters, books, and papers. For novice researchers, collaboration is a means to get their research published and increase productivity through such associations and co-authorships” (Sooryamoorthy, 2014: 534). Therefore, unless an academic professional is self-sufficient, difficulties to establishing positive professional networks might result in negative work-related outcomes for FAs (Smith et al., 2010).

According to Stainback et al. (2016 cited in Kinnear & Ortlepp 2016: 3), the “lack of access to high-status colleagues with whom to network was frequently cited as a barrier to women’s advancement”. Likewise, in their qualitative study, Kinnear and Ortlepp (2016) reported that some of the women participants felt that they were “not being very good at networking”, “would have liked a bigger network of females in a similar position to connect with in a very confidential, open and transparent way”, and “would like to know how men feel about themselves”. Clarke et al. (2015) thus assert that professional networks have implications for the work-life of academics, since the essence of academic work efficiency depends heavily on the constant exchange of ideas among academics. In other words, without professional networks and networking channels, the exchange of ideas, cannot take place.

There is evidence suggesting that professional relationships that are perceived as positive are likely to positively influence the attitudes and feelings that individuals have toward their work. Tharenou (1994) used the concept of “managerial momentum” to refer to a continuous process of upward mobility in a workplace. When individuals enter academia, they expect to experience a positive career progression within their academic fields within the university. Managerial momentum is greatly influenced by professional networks, which is ultimately influenced by an individual’s ability to interact effectively and harmoniously with other individuals who share similar work ideals. As academics establish and maintain positive professional networks, the potential/expected outcome are that they might become more

productive in multidisciplinary projects and achievements (Leibowitz et al., 2014). Therefore, it may be anticipated that strong professional networks can operate as protective factors, having a positive impact on FAs' work-life experiences and PR.

While professional networks may influence a person's professional status, networking involves interacting with other people with different personalities, views, and experiences. Therefore, the issue of interpersonal conflicts which is common to workplace environments should be considered in this study (Reddy et al., 2016; Rickinson, 2011). For example, on the grounds of workplace gossiping, bullying, harassment, and discrimination [e.g., for new academic members], networking can be especially challenging for FAs who are learning how to represent themselves professionally, both with peers and more experienced academics (Reddy et al., 2016; Sougou et al., 2022). These work-based interpersonal problems can ultimately lead to adverse psychological states such as uncertainty, stress, and anxiety.

The broader literature of women in the workplace, further highlights other types of obstacles to FAs' ability to establishing professional networks. These include negative preconceptions about gender roles and responsibilities in society which leads to increased women's role stereotyping, lack of work experience and KSAs opportunities, and lack of coaching and mentoring support (Cadete, 2017; Kinnear & Ortlepp, 2016; Kouta et al., 2017; Love et al., 2022; Payne & Doyal, 2010; Tharenou, 1994). From the South African HEIs context, such trends appear to be related to what Idahosa (2019) has called "the reproduced apartheid ideologies", which seems to promote the "internalisation of gendered norms and assumptions about women's roles" and further drives the misrepresentation of women in South African universities (2019: 10).

These trends have accentuated the need for HEIs in South Africa to provide FAs, especially new academics, with opportunities to improve their networking KSAs. One of the concepts which Reddy et al. (2016) has unpacked in connection to the importance of networking for early academics at UKZN is "communities of practice". This concept involves a "deliberate democratic approach" to engaging in constructive discussions platforms whereby more senior academics share their experiences with early career academics by working in groups (Reddy et al., 2016: 1830). To reinforce the above assertion, a facilitator in the Reddy et al. (2016)

study reported that “the idea of working in groups fosters a quest for sharing, learning and a networking spirit”. He also asserted that “a deliberative democratic approach not only allows for delegates to learn how to sustain arguments, listen to each other, and respect dissenting views, but contributes greatly to the maintenance of the notion of communities of practice” (Reddy et al., 2016: 1830).

Another key concern relates to the younger generations of FAs who might be expected to be less involved in developing and maintaining professional networks. This expectation is suggested, seeing that studies indicate that women in HEIs are increasingly combining paid work responsibilities with family responsibilities (Payne & Doyal, 2010; Toffoletti & Starr, 2016; Williams, 2017). A key point is that in the long run, FAs, who enter and make progress in an academic profession, might not be flexible in maintaining professional networks since much of their time may be affected by activities outside of the workplace environment.

There is a general acknowledgement that building and maintaining strong professional networks takes time, energy, and commitment. In addition, FAs who have significant household responsibilities and family commitments may find it difficult to build/maintain professional connections/networks because of the lack of time (Idahosa, 2019; Marsay, 2020; Williams, 2017). Considering this, establishing professional networks may be more difficult for women than men in academia. For example, the proportion of male academics with larger professional networks is significantly higher than the proportion of FAs, even though FAs have grown in numbers over the last two decades (Council on Higher Education, 2016b; Clarke et al., 2015; Savigny, 2014; Tharenou, 1994). This is due in part to the extent by which men and women prioritise work over family. Perhaps it has become more necessary for HEIs to actively address key issues of gender which tend to disadvantage women and advantage men in academia. As indicated by Moodly and Toni (2017: 143), the lack of professional support and networks for the benefit of women is among the unintended consequences of having a culture that favours men in HEIs.

In another study, Williams (2017) found that the institutional culture of the university contributed to women being concentrated in lower academic positions because it is still operated according to the traditional career path of men. The culture of the university which

is reflected in the HRM practices, therefore, can either hinder or facilitate professional networks/networking. While organisational policies might be seen as a legitimate way of establishing professional networks; networking is also dependent on a person's ability to network. A professional self-efficacy approach, emphasises the importance of the self in taking responsibility for their professional network profile. This approach places the onus on working individuals to voluntarily subject themselves to networks where they can draw on the expertise of various professional networks. Importantly, HEIs may need to increase resources and commitment to address issues that limit FAs' ability to build stable professional networks. Providing support in this area will result in women becoming more resilient by using current connections as protective networks of support to stimulate positive adaptation in the face of work-life adversity. In other words, professional networks can benefit both FAs and their universities.

### **2.3.6. WEF Six: Coaching Support**

Southwick et al. (2014: 5) state that "the decision to fight back against adversity is a complicated one that many people have the remarkable capacity to make". The previous sections explored areas of concern that directly impact the primary work roles of academics and their resilience. This section and the next section are also particularly important because through coaching and mentoring, not only the personal/professional development among FAs can be stimulated, but it is also possible to influence resilience among FAs. While the concepts of coaching and mentoring are often used interchangeably there are clear differences in meaning, applications, and implications of the two concepts. An example of these differences as provided by Morgan and Rochford (2017: 10), appears in Appendix I. In the HEIs context, a lack of coaching and mentoring support makes performing certain academic roles difficult, and will often warrant stress, especially among FAs with high KSAs need. What follows therefore is a discussion on the extent to which WEFs such as lack of coaching and mentoring can have on FAs' resilience at South African HEIs.

By broad definition, coaching refers to "interventions used by organisations to extend knowledge and develop opportunities for executives, managers or senior staff members" (Cleary & Horsfall, 2015: 243). As far as resilience is concerned, the following factors

highlight the key objectives of the coaching and expected results (Carmel & Paul, 2015; Cleary & Horsfall, 2015; Morgan & Rochford, 2017):

- i. Task oriented. This factor is identified as a factor of resilience when working individuals cannot or do not fulfil an expected responsibility in terms of their job specification (Cleary & Horsfall, 2015). The relevant coach or expert can intervene by providing necessary coaching interventions to ensure fulfilment of academic functions such as teaching and research for example. A coach can be used to increase levels of resilience of FAs by introducing protective factors that translate into FAs' learning better ways to cope with stress, anxiety, and depression due to WEFs (Cheesebrough et al., 2020; Ioannidou et al., 2019; Johnson & Lester, 2022; Uwizeye et al., 2021).
- ii. Short term. Coaching is an area where lead-time can be reduced. This factor concerns the positive relationship between the coach and coachee taking a relatively small amount of time (Morgan & Rochford, 2017). Where needed, coaching can be extended for a longer period of time, to provide additional training or instruction requirements to coachees (Carmel & Paul, 2015).
- iii. Performance driven. This factor addresses whether employees are underperforming on the job. Coaching has been found to be particularly helpful for academics with little resilience KSAs, with outcomes such as improved subject teaching knowledge, improved scientific research knowledge, and better management skills (Cheesebrough et al., 2020; Rickinson, 2011; Robertson et al., 2015). For example, without subject teaching knowledge, academics might develop a sense of uncertainty about the subjects they lecture; without scientific research knowledge, academics research output productivity will remain limited; and without management skills, academics might not be able to cope with extensive administrative processes (Leibowitz et al., 2014).
- iv. No design requirements. A lack of formal plan or design has been identified as a key feature of the process of coaching. It has been suggested that coaching programmes and assessment tools, are usually not required for purposes of determining competency area and expertise needed (Morgan & Rochford, 2017). According to Morgan and Rochford (2017), unless coaching is required for a large group of people, then the lead

time may be increased to accommodate the varying needs and requirements of individuals during the coaching process.

- v. The immediate [line] manager is directly involved in the coaching process. In the coaching process, line managers are considered important role-players in assisting coaches identify key areas of expertise in which employees need coaching (Morgan & Rochford, 2017). Therefore, line managers have a direct involvement in the coaching process.

### **2.3.7. WEF Seven: Mentoring Support**

Mentoring is generally described as “offline help by one person or another in making significant transitions in knowledge, work or thinking” (Morgan & Rochford, 2017: 4). Mentoring is increasingly being recognised as an important component of positive support in academia, and in the context of HEIs can be regarded as “a relationship between a junior and senior member of the organisation in the workplace” (Ismail et al., 2012: 651). Mentoring support is another likely contributor of resilience which can mitigate some of the risk factors faced by FAs (Segarra & Gentry, 2021; Talbert et al., 2021). As with coaching support, the literature (Clarke et al., 2015; Cleary & Horsfall, 2015; Ferman, 2011; Morgan & Rochford, 2017; Schulze, 2015) provides the following factors that are necessary for a successful mentoring process/relationship:

- i. Relationship oriented. It is noted in the literature that it is not inevitable that FAs will be involved in undertaking and maintaining family-life responsibilities (Schulze, 2015). In many contexts, FAs may feel that they do not have control over balancing their professional and personal lives. It is widely acknowledged that individuals who lack the ability to demonstrate resilience in the face of professional and personal adversity, tend to become vulnerable individuals in need of mentoring. A mentor needs to be able to sympathise with mentees, displaying sentimental understanding of what they may be experiencing. In contexts of improved work/life balance, self-confidence, and self-perception for example, mentoring support, the inclination to become vulnerable to adverse outcomes is meaningfully reduced.

- ii. Long term. Unlike coaching [where the duration of the programme is relatively shorter], mentoring is long term, allowing mentors and FAs to build a climate of trust that creates an active learning environment which promotes PR and mitigate some of the prevalent work-life issues that FAs may encounter (Carmel & Paul, 2015; Casad et al., 2021; Olenick et al., 2019).
- iii. Development driven. The concept of ‘development’ is an important one, as far as the emancipation of women from patriarchal structures of dominance and subordination in the world of work are concerned. According to Daya (2014), development refers to career development plans for all individuals in the organisation. In the context of academics with teaching roles in HEIs, a study by Maier-Hoifer (2015 cited in Poyner 2016: 17) found that “...that mentor relationships were particularly helpful in assisting lecturers navigate challenging situations and problem solving”. From the same perspective, the study conducted by Subbaye and Dhunpath (2016) at UKZN suggested that mentors are particularly important for academics performing teaching roles. The research found that academics had limited training and mentoring in teaching and often felt overwhelmed by the class sizes. As Daya (2014: 300) has asserted: “A development plan does not necessarily mean that all employees will be promoted within the organisation, but suggests that employees will be provided with the training and development to grow their competencies and skillset in line with market requirements”. Accordingly, this study suggests that resilience capacity development in the context of women in academia can be achieved through mentoring initiatives.
- iv. Design requirements. As has been established, some of the issues affecting resilience of FAs are developmental issues. It costs the university money each time an employee experiences unhealthy stress. A mentoring programme design consists of working towards identifying [or developing] and maintaining protective mechanisms that help FAs mitigate challenges as they come. The mentoring process may be designed to assess non-workplace factors such as mindfulness, self-efficacy, coping, and neuroticism, which are considered as key factors contributing to resilience of working women (Cadete, 2017).

- v. The immediate [line] manager is indirectly involved in the mentoring process. In the mentoring process, mentors and mentees establish a relationship where the mentoring process depend on what both mentor and the mentee deem to be relevant for the mentor to learn (Ismail et al., 2012). In this respect, line managers may not play an active role to assist mentors identify key areas of expertise in which employees need mentoring, unless of course line managers themselves play the role of mentoring the employee in question. It is important to emphasise that individuals seen as potential mentors may not necessarily serve the mentoring purposes of FAs, and therefore, FAs can and should be able identify role models who they believe can become their mentor and contribute strongly to their quality of work life.

The nature and conditions of employment in HEIs suggest that coaching and mentoring support should exist within senior and junior academic appointments [i.e., part-time appointments, fixed term appointments, and permanent appointments]. With respect to teaching, research, and administrative work activities, FAs differ in terms of education levels, KSAs, and work experience, and so a coach and a mentor are believed to provide increased self-developmental behaviour, by drawing upon their own experiences of undertaking specific academic assignments (Carmel & Paul, 2015). In addition to contributing to career self-development of other academics, some negative psychological outcomes might also be mediated through coaching and mentoring interventions. Given these implications, it is evident that by providing coaching and mentoring resources and support, HEIs will be contributing to FAs' positive sense of self-confidence, interpersonal skills, and work performance, which in turn may contribute to a positive sense of resilience (Cleary & Horsfall, 2015; Ismail et al., 2012; Newsome et al., 2021; Talbert et al., 2021).

### **2.3.8. WEF Eight: Total Rewards [Compensation & Rewards]**

The concept of total rewards is traced back to various theories including two-factor theory, self-determination theory, cognitive evaluation theory, hygiene factors, and hierarchy of needs theory (Robbins & Judge, 2013). These theories share two common factors that have been identified in the literature as critical factors predicting resilience of academic professionals. For instance, in some cases, extrinsic motivation may hinder work satisfaction, whereas in others it can promote it. The concepts of intrinsic or extrinsic motivation are well-known in

the university environment as far as positive strategies to encourage university students learning attitudes (King & Bunce, 2020; Robbins & Judge, 2013; Shin & Jung, 2013). In other words, FAs might apply these concepts in the classroom to promote students' learning interests, performance, and proficiency. In this regard, Fry et al. (2009: 28) explained the importance and implication of intrinsic or extrinsic motivation of academic students as follows: "Intrinsically motivated students enjoy a challenge, want to master the subject, are curious and want to learn; while extrinsically motivated students are concerned with the grades they achieve, external rewards and whether they will gain approval from others". These notions support the literature that have identified "lifelong learning skills" as academic professional's intrinsic motivation to remain in academia (Council on Higher Education, 2016b; Clarke et al., 2015; Subbaye & Dhunpath, 2016). The researcher believes that to conquer challenges resulting from HEIs' WEFs, it is critical that academics instil in themselves the desire for lifelong learning, which entails the development and application of resilience KSAs.

As such, academics entering South African HEIs will either be intrinsically or extrinsically motivated by the prospect of academic work. For Fry et al. (2009), notions of intrinsic or extrinsic motivation, should be reinterpreted and restated from an academic professional perspective. For example, intrinsically-motivated academics may enjoy a challenge, feel the need to master the subjects of their academic fields, be curious and feel the need to learning more; while extrinsically-motivated academics may be more concerned with being compensated for their teaching, research, service, and other roles performed (Fry et al., 2009). A recent example of the importance of total rewards for general academics at UKZN appears in Table 2.1.

**Table 2.1. Motivating Factors for Joining Higher Education**

<b>Motivators</b>	<b>%</b>
<u>Extrinsic factors</u>	<u>27.4</u>
Benefit options	9.7
Career development	8.1
Job availability	3.2
Lifestyle	4.8
New challenge	1.6
<u>Intrinsic factors</u>	<u>72.6</u>
Contribute to society	3.2
Intellectual space	64.5
Opportunity to teach	3.2
Academic space	1.6
Total	100.0

Source: Subbaya and Dhunpath (2016: 1811)

Table 2.1 sums up the motivating factors for entering the academic profession within the context of South African HEIs, as per Subbaya and Dhunpath (2016) study, and illustrates the factors which had the most and least impact on the motivations of academics to work at UKZN, during the time of their study. For example, the result suggests that 73% of early career academics were motivated by intrinsic factors. Table 2.1 also shows that in connection to intrinsic motivation, 65% of academics were motivated to work in an environment that afforded them intellectual space (Subbaya & Dhunpath, 2016). In this context, only 27% of academics were motivated by extrinsic factors (Subbaya & Dhunpath, 2016). The evident conclusion is that, by and large, the constructs of intrinsic and extrinsic motivation [or total rewards] is opportune to a pragmatic paradigm of studying resilience taken in this study. In other words, a certain form of reward [whether in a HEIs and non-HEIs context] can be internalised as a protective factor where such a reward is constructed or perceived as an important factor to influence a person's resilience, and indeed, a person's overall well-being.

The concept of work-related rewards contributes an important perspective to the subject of psychological resilience of FAs. Rewards in the context of organisational commitment of academic staff is relatively clear. Total rewards are, in the view of Mabaso and Dlamini (2018),

the fuel through which the organisation's objectives can be achieved. The author has highlighted six essential components of rewards that should reflect an organisation's strategy to attract, motivate, retain, and engage employees. Total rewards include financial compensation, fringe benefits, work-life programmes, performance, recognition, and talent development (Mabaso & Dlamini, 2018). Even though this study has not been developed to explore the psychological resilience experiences of academics, the study categorised total rewards as a key element in addressing different financial and non-financial needs of women academics which has implications for an academic's overall well-being (Council on Higher Education, 2016b; Mabaso & Dlamini, 2018). Therefore, in the context of resilience, a female academic's positive sense of self-worth which is promoted by having reasonable total rewards [financial and non-financial rewards] is likely to have a significant impact on both their physical and mental well-being (Council on Higher Education, 2016b). As discussed in the next sections, there are various ways in which rewards may relate to the adversity that FAs may face.

#### 2.3.8.1. Non-Financial Rewards

It is well-documented that self-development [also called personal development and employee development] can have a positive impact on women's sense of resilience (Cadete, 2017; Hameed & Waheed, 2011). To help FAs cope with the work-life challenges faced, universities may need to increase their support for the self-development of FAs. There is a plethora of feminist and gender-oriented studies arguing the need for workplaces to play an active part in addressing workplace environment issues that often undermine the self-development of female employees (Cadete, 2017; Kinnear., 2014; Mrčela & Ignjatović, 2013; Savigny, 2014; Turbine & Riach, 2012). According to Kinnear (2014: 69), "the self-development of individual women is related to their conceptualisation of gender issues and the broader evolution of the feminist movement". The prospect for self-development and the ability of individual women to influence various domains of their lives, is regarded by Cadete (2017) as a potential intrinsic motivation for which women might be allured to a certain workplace environment. Furthermore, self-development can be identified as a protective factor, and a pre-requisite for resilience of working women (Lian & Tam, 2014; Mayer & Surtee, 2015).

It is not uncommon that intrinsic motivations such as ‘self-development’ may raise questions about whether a person’s self-development should be the responsibility of the individual, or the responsibility of their organisations. Taking the perspective of Bandura (2006: 176), which suggests that “employees have to take charge of their self-development to meet the challenges of evolving positions and careers over the full course of their work lives”, it is possible to appreciate the fact that self-development ultimately depends on the efforts that individuals put towards their self-development. However, what cannot be disputed is that self-development influences a person’s overall perceptions, attitudes, behaviour, and experiences of work. A positive sense of self-development has a positive impact on the work-life of FAs. On the other hand, a negative sense of self-development will likely have a negative impact on the work-life of FAs. Therefore, discussing self-development of FAs without taking into consideration the role of their university in their overall work-life experience, might create or promote the view that universities neglect or fail to care for the self-development of FAs. Importantly, the fundamental role of the university’s HRM in a person’s career development may be undermined, if these perceptions and assumptions are shared by FAs.

As has been noted earlier, in some studies, it is well established, that KSAs are linked to resilience, which is linked to personal development. For example, in a 2009 scholarly investigation in the context of the South African Higher Education, it has been indicated that “people are trained for all professions, but promotion of scholarship and academic skills in HE depends heavily on intrinsic rewards such as self-respect, responsibility and a sense of accomplishment” (Bitzer, 2009: 284). The self-development of FAs is therefore a subject of interest for the institution being investigated in this study. Howe-Walsh and Schyns (2010: 264 cited in Maharaj, 2014: 77) put it well when they note that, “even though individuals have taken on the responsibility for their careers to a great extent, the organisation that employs them still has a responsibility to contribute to their personal and professional development”. This leads to an important conclusion that in the context of resilience, self-development of FAs, cannot be solely understood from the individual level, but from both the individual and the organisational levels. As such, self-development should be approached from a holistic angle whereby for example, FAs, their university’s management and HRM, all actively work toward the end goal of promoting positive work experiences for FAs.

### 2.3.8.2. Financial Rewards

Total rewards have wide-ranging implications for HEIs and staff members alike. Mabaso and Dlamini (2018) have noted that financial rewards range from base pay, pay for performance, pay for skills and competencies, and indirect financial rewards such as benefits. Embedded in this description are concepts of employee motivation, commitment, and satisfaction, which may increase if FAs have positive perceptions/experiences of financial rewards received. It can be assumed that when HEIs provide extrinsic rewards [alongside adequate intrinsic rewards] by way of financial rewards, this has a positive impact on staff sense of health and resilience (Payne & Doyal, 2010). Various researchers have identified adequate financial rewards as an offset against stresses experienced by academics due to financial pressures in their lives (Ferman, 2011; Lesenyeho et al., 2018; Mabaso & Dlamini, 2018; Tharenou, 1994).

Financial rewards are not just about rewarding FAs in exchange of their time, efforts, and results at work. It is also about removing from compensation schemes, any bias associated with the sex composition of jobs or their sex labels (Reskin et al., 1992). Financial rewards become a source of stress for women in academia when universities fail to reward them adequately for the work performed. It has been suggested that rewards structures/systems in academic workplaces tend to disadvantage women despite having an equally meritorious work performance as male academics (Reskin et al., 1992). This suggests that despite the considerable strides towards improving access for women in HEIs and academic jobs over the last few decades, the transformational goals as defined/recommended by legislations such as the Employment Equity Act and the Basic Conditions of Employment Act remain a concern for HEIs (Council on Higher Education, 2016b; Mabaso & Dlamini, 2018; Portnoi, 2015). From this perspective, HEIs should focus extensively on implementing rewards systems that reward FAs fairly, equitably, and consistently, in accordance with these legislations.

The issues of salary disparities [and other monetary rewards] by gender in South African HEIs are well known, although only a few scholars have investigated it (Archer, 2017; Lesenyeho et al., 2018; Mabaso & Dlamini, 2018; Murray, 2014; Seyama & Smith, 2015; Van Veelen & Derks, 2021; Wolhuter, 2015). According to research conducted by Reskin et al. (1992), monetary rewards in the university context can be differentiated into two distinguishable pay concepts. The first is “pay equity” [also known as “comparable worth”] which refers to paying

staff in a non-discriminatory manner. This essentially means that there may be instances where sex segregation in academic institutions makes substantial pay inequity possible (Reskin et al., 1992). The second is “equal pay” which refers to paying staff in the same job equally (Reskin et al., 1992: 33). According to Reskin et al. (1992: 33) when people perform “jobs that can be shown, through job evaluation, to make similar demands on the worker in terms of responsibilities and other requirements”, then people should be paid equally.

In essence, Reskin et al. (1992: 33) asserts that “inequities in pay occur if the sex composition of a discipline affects faculty salaries, net of legitimate determinants of salary, or if tasks that are disproportionately assigned to female faculty members [e.g., teaching large service courses, advising students] are systematically under-rewarded”. Owing to the South African education system post-apartheid [which has collaborated with the introduction of gender equality policies], it is possible that South African HEIs are still battling to address pay inequity issues in the context of academic staff. As this study is based on the South African context of HEIs, the issue of pay inequities is likely to be negative factor contributing to FAs’ lower levels of resilience.

Even though a recent study at UKZN has indicated that academics were mostly motivated by intrinsic rewards (Subbaye & Dhunpath, 2016), several researchers in the broader higher education field concur that compensation in the form of financial rewards remains a major motivating factor for academics in HEIs (Council on Higher Education, 2016b; Ferman, 2011; Lesenyeho et al., 2018; Mabaso & Dlamini, 2018; Reskin et al., 1992; Seyama & Smith, 2015; Wolhuter et al., 2013). Inadequate financial rewards can lead to lower sense of self-worth (Daya, 2014). In fact, levels of stress in FAs in HEIs across the country and worldwide has been aggravated because of lack of pay equity systems in universities. It can thus be expected that resilience of FAs is potentially enhanced if academics perceive total rewards processes in their universities as being implemented fairly; and if they perceive that self-development support is provided by the university.

## 2.4. CHAPTER SUMMARY

Drawing on an in-depth review of literature within HEIs in South Africa and internationally, this chapter has identified and provided an overview of eight WEFs in the context of HEIs that influence PR of FAs. The factors discussed were as follows:

- i. Teaching demands;
- ii. Research demands;
- iii. Administrative demands & skewed workloads;
- iv. Knowledge, skill, and ability [KSAs];
- v. Professional networking;
- vi. Coaching support;
- vii. Mentoring support;
- viii. Total rewards.

A brief background and overview of the social construction of gender theory has been provided to emphasise the gendered nature of work and processes in HEIs. This theory has helped make sense of the gender differences that exist between women and male academics in relation to the negative experiences that women face in terms of WEFs in a university workplace environment. The literature revealed that in terms of the WEFs identified, women in academia are more likely to experience negative psychological outcomes including stress, anxiety, and burnout due to lack of interventions at institutional level.

Beyond the negative experiences of women due to adverse WEFs, the chapter highlighted that a lack of resilience qualities further increases vulnerability of FAs to work-related adversities. The chapter also identified a number of factors recognised as vital components of resilience for individuals working in difficult and challenging workplace environments such as the university environment. These factors are discussed in the proceeding chapter to provide insights into the relevance of resilience for women in academia. The next chapter will also provide insights into the extent to which HEIs' HRM practices and processes can hinder or promote resilience among FAs.

## CHAPTER THREE

### AN OVERVIEW OF THE THEORY OF PSYCHOLOGICAL RESILIENCE

#### 3.1. INTRODUCTION

Chapter two of this study identified and provided a literature review of potential workplace environmental factors [WEFs] that negatively impact the psychological resilience [PR] of female academics [FAs] in South African Higher Education Institutions [HEIs]. As previously discussed, WEFs in HEIs continue to present many obstacles and constraints to women academics. Moreover, the socially constructed gender roles have been central in the HEIs literature, suggesting that adverse WEFs may affect more women than men in HEIs, due to the gendered ideologies of work. The potential adverse or negative mental health outcomes that result from WEFs, therefore, are prominent concerns for FAs and the South African university under investigation.

The idea for encouraging resilience practices within the workplace context is not novel. Several studies established that in the absence of resilience resources, many people might be unable to withstand highly stressful events without experiencing serious debilitating effects (Marin et al., 2022). The World Health Organisation has connected burnout specifically to phenomena in the occupational context and emphasised that it should not be applied to describe experiences in other areas of life (World Health Organisation, 2019a). Reviewing the existing literature of women in academia globally, one finds that countries in the European region have played and continue to play a significant role in promoting mental health at work through resilience interventions. Currently, little is known about the resilience measures that HEIs workplaces in South Africa have established to prevent mental health concerns and promote resilience in academic staff. The introduction of resilience interventions within South African HEIs helps both HEIs and academics to identify the mechanisms by which resilience outcomes can arise.

This chapter provides an overview of the theory of psychological resilience by delving into the trajectory of resilience research as evidenced in the works of pioneers in the field of resilience. The chapter begins by presenting a brief historical overview of the concept of resilience, followed by a review of different definitions of resilience and concepts associated with

resilience, to enrich the understanding of the nature of resilience. Moreover, the concept of resilience within the workplace context and the concept of work-life balance/imbalance are discussed, since research has been unequivocal whether women are more likely to be adversely affected by stress within and outside of the workplace environment due to socially constructed gender-roles. Following this, the chapter then reviews the concepts of mental health and resilience, where concepts such as stress, anxiety, depression, burnout, and compassion fatigue are examined in relation to women in academia. The discussion of these concepts also serves to provide context for the larger research goal of the thesis addressed in chapter four.

### **3.2. A BRIEF OVERVIEW OF THE PSYCHOLOGICAL RESILIENCE THEORY**

Internationally, the concept of psychological resilience has over the decades been studied from across different fields, settings, and contexts, (Connor & Davidson, 2003; Rees et al., 2015; Rutter, 1985; Shrivastava & Desousa, 2016; Southwick et al., 2014 Panter-Brick, & Yehuda, 2014; Wagnild & Young, 1993; World Health Organisation, 2017a). Psychological resilience emerged as a fundamental human developmental need within the field of positive psychology [i.e., the mental health discipline] and includes various theoretically inter-linked variables that provide meaningful explanations concerning the ability of individuals to experience positive outcomes during or following a crisis/adversity (Pan & Chan, 2007; Shrivastava & Desousa, 2016; Zhang, 2021).

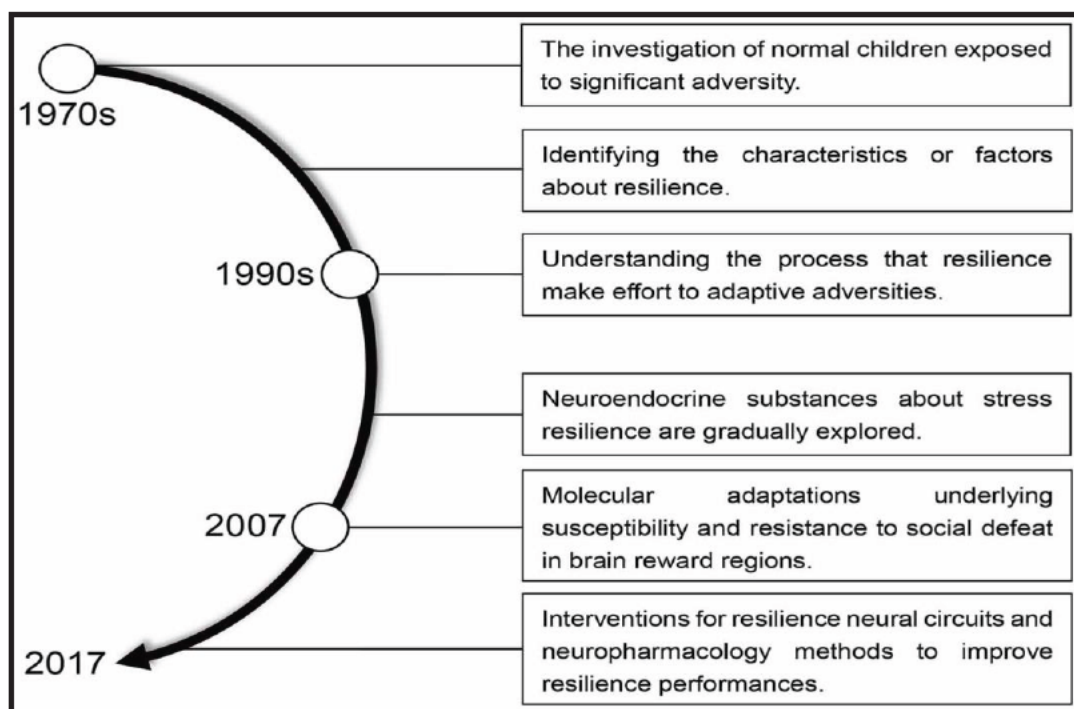
Historically, resilience researchers might not be immediately drawn to the significance of resilience within the working population (Masten et al., 2004; Robertson et al., 2015; Van Breda, 2001). It should be noted that the need to understand resilience arose from studies investigating childhood adversity, where many early resilience researchers focused on developing resilience interventions for children at risk of psychopathology or mental disorders due to parental or family-related adversities (Garmezy, 1971, 1974; Lazarus & Folkman, 1984; Luthar & Cicchetti, 2000; Masten et al., 2004; Masten et al., 1988; Masten et al., 1999; Rutter, 1985; Southwick et al., 2014). The pioneers in the study of resilience in children addressed the pivotal question of whether risk factors and negative outcomes related to potentially adverse life events influenced adaptation and developmental trajectories of children at risk (Garmezy, 1971, 1974; Masten et al., 2004; Masten et al., 1988; Masten et al., 1999; Rutter, 1985; Southwick et al., 2014). While it is beyond the scope of this chapter to provide details about

the factors affecting resilience in children, the pioneers in the field of resilience, as well as emerging resilience scholars, are clear that a link exists between resilience in childhood and adulthood, where the quality of the environment an individual is exposed to in childhood is believed to play crucial role in influencing resilience in adulthood (Lazarus & Folkman, 1984; Luthar, 1991; Luthar et al., 2015; Masten, 2006; Van Breda, 2001; Yazawa et al., 2022).

Many of the contributors of resilience theory have well-illustrated the fact that even though people can experience positive outcomes at different points in their lives, without perceiving or experiencing adverse events, perceiving or experiencing resilience is unlikely (Borucka & Ostaszewski, 2008; Ledesma, 2014; Van Breda, 2001). Overall, these resilience research contributors suggest that experiencing positive outcomes and negative outcomes in everyday life is a common experience for human beings. However, during times of profound adversity, which may occur more frequently and intensely, and for a more enduring timeframe, people face the most significant challenges to regulate their emotions (Lazarus & Folkman, 1984; Luthar, 1991; Luthar et al., 2015; Masten, 2006; Van Breda, 2001). It is in times of significant adversity that individuals might be stretched to their breaking-points, and their resilience is tested. The greatest challenge facing individuals is associated with maintaining psychological and emotional homeostasis or a sense of internal balance between positive outcomes and negative outcomes under enduring adverse circumstances (Fletcher & Sarkar, 2013; Kent et al., 2015; Möller, 2008). Put differently, a lack of internal and external resources makes positive emotions co-occur with negative emotions more unlikely, causing enduring negative outcomes. Notwithstanding this fact, sustaining internal resources during times of adversity appears to be the central factor that differentiates people who can cope, from those who cannot cope with adversities (Adegoke, 2015; Lunt et al., 2007; Reich et al., 2010; Southwick et al., 2014).

During the past 50 years, more significant information has become available on resilience than in the previous 2000 years. Figure 3.1 provides an overview of the evolution of resilience from which six important themes depicting the evolution of the history of human resilience can be identified. The data contained in Figure 3.1 provides a consolidated summary of the history of human resilience, a rich opportunity for modern resilience scholars, scientists, and theorists as well as health practitioners to look at different understandings of resilience over time, and

unearth even more advanced resilience theories for everyday life circumstances. Historically, investigations of adversity adaptation have generally described resilience as an exception, rather than a rule. That is, that resilience is an inborn characteristic or trait which is unchanging. However, more recently [from early year 2000s to date], and from the perspective of resilience development, scholars, scientists, and theorists, have shown an increased interest in the process of resilience, and continue to find that human resilience is a phenomenon that individuals can adapt to (Fulton et al., 2021; Poyner, 2016; Reich et al., 2010; Sarkar & Fletcher, 2014). In other words, that resilience is not an extraordinary quality, but rather an ordinary quality learnable by everyone (Poyner, 2016).



**Figure 3.1. A Brief History of Resilience Research**

Source: Liu et al. (2018: 2)

Such understanding is satisfactory because it allows contemporary scholars to make further contributions to resilience theories, and hopefully aid in resolving resilience concerns at the individual [both children and adults], family, community, workplace, and policy level (Yazawa et al., 2022). Historically, resilience has been associated with several non-WEF concepts of adversity. Some of the relevant concepts that have significantly contributed to the emergence of the resilience theories are schizophrenia, traumatology, social adversity, and non-normative

episodes such as natural disasters (Frankl, 1992; Garmezy, 1974; Garmezy & Streitman, 1974; Lazarus & Folkman, 1984; Luthar, 1991). These factors may explain the relative increased interest in research around neuropharmacological approaches to improve human resilience between the late 1990s and early 2000s (Liu et al., 2018; Reich et al., 2010; Stacy & Schulkin, 2022; Van Breda, 2001).

According to the World Health Organisation (2017a), the traumatology discipline has initially been the main field of enquiry of resilience in adults and the elderly. It is acknowledged that resilience is indispensable to promote overall mental health to provide people with resources to fight against negative health outcomes. Although earlier studies have recognised the adverse impact of WEFs, resilience was initially examined in terms of adversity outside the workplace. Indeed, the World Health Organisation (2017a: 8) reports that in the past, studies of resilience tended to focus on individual trauma or community shocks resulting, for example, from ecological disasters and natural calamities such as earthquakes. In many instances, individuals depended and still rely primarily on antidepressants to cope with unpleasant experiences (Liu et al., 2018). It is implicit in the concept of resilience that people who experience positive resilience outcomes, despite significant adverse conditions, are likely to have more resources than people who do not. One of the main concerns in the medical literature, when it comes to prolonged suffering, has been for those who are unable to cope with chronic [physical] pain, tension, stress, anxiety, and who may also become more vulnerable to brain and nervous system dysfunction, causing a decline in physical and mental health (Kent et al., 2015; Luthar et al., 2015). Hence, studies allied to medicine such as neuropharmacology and toxicology have influenced and continue to influence the development of preventative and remedial medicine practices [i.e., antidepressant medicine] for stimulating the brain and nervous system, thus promoting resilience in individuals [especially the clinically depressed individuals] (Academy of Medical Sciences, 2008; Liu et al., 2018; Möller, 2008; Stacy & Schulkin, 2022; Stix, 2018; Stone, 2019; Yong et al., 2020; Lim, 2020). The next section provides a brief historical overview of the construct of resilience.

### **3.3. THE THEORY OF PSYCHOLOGICAL RESILIENCE**

A major theoretical question in human resilience research concerns the nature of resilience. The terms ‘resilience’, and ‘psychological resilience’ are often used interchangeably with those

of ‘individual resilience’, and ‘human resilience’ to describe a person’s adaptation to adverse situations. Given the strong psychological basis of the origins of this phenomenon, psychological resilience seems to be a more descriptive term for use throughout this study. The term ‘psychological’ comes from the discipline of psychology to emphasise a person’s mental state and emotional well-being. Translated from the Latin word *resiliens* [referring to the pliant or elastic quality of a substance] (Ledesma, 2014); resilience is thought to be a fundamental factor in the promotion of the positive mental state and emotional well-being of individuals experiencing high levels of workplace stress. In this way, resilience is a psychological outcome; hence, psychological resilience.

In the past, there was disagreement surrounding the conceptualisation of resilience. Researchers tended to study resilience single-mindedly and referred to resilience as either a personal trait, a process, or an outcome (Pan & Chan, 2007; Liu et al., 2018; Yang, 2018; Luthar & Cicchetti, 2000; Reich et al., 2010; Robertson et al., 2015; Curran, 2015). Clarifying these resilience orientations is extremely important. First, the trait-oriented approach looks at the types of personal qualities or attributes that distinguish resilient individuals from non-resilient individuals (Connor & Davidson, 2003). Second, the process-oriented approach focuses on the interaction between the individual personal characteristics and social environments and emphasises that resilience is a dynamic process which changes over time (Fulton et al., 2021; Luthar & Cicchetti, 2000). Third and lastly, resilience can also be understood from an outcome-oriented approach leading researchers to conceptualise resilience based on the extent to which individuals show positive outcomes despite experiencing adversity (Masten, 2001). Although, the debate continues about the best approach for describing resilience, more recently, literature has emerged that offers evidence that factors of resilience overlap, and therefore resilience can be seen as a composite feature of trait, process, or outcome (Pan & Chan, 2007; Liu et al., 2018; Luthar & Cicchetti, 2000; Reich et al., 2010; Robertson et al., 2015).

Norman Garmezy is probably one of the most frequently cited scholars on resilience in the current resilience literature within the context of the workplace environment. He posed that “resilience means the skills, abilities, knowledge, and insight that accumulate over time as people struggle to surmount adversity and meet challenges. It is an ongoing and developing

fund of energy and skill that can be used in current struggles” (Garmezy, 1994 cited in Van Breda, 2001: 5; Saleebey, 1996: 298). Advances in social science methodologies and methods have made it possible for researchers from different disciplines to test theories around resilience more holistically. Thus, the construct of resilience tends to be interpreted within the context of the social environment where the study took place, with different researchers generating different definitions of PR (Shrivastava & Desousa, 2016; Sturgeon & Zautra, 2013). For example, Shrivastava and Desousa (2016: 38) define resilience as “the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state”. Sturgeon and Zautra (2013: 2) define resilience as the “maintenance of positive physical and emotional functioning in spite of significant difficulty or challenge”. Garcia-Dia (2013 cited in Rees et al., 2015: 2) define resilience as “the ability of a person to recover, re-bounce, bounce-back, adapt or even thrive following misfortune, change or adversity”.

As can be seen, numerous definitions of psychological resilience exist. That is, resilience can be viewed from a variety of contexts. Various resilience researchers have demonstrated that resilience is not related exclusively to the workplace environment or domain (Brown, 2012; Luthar et al., 2015; Masten et al., 2004; Robertson et al., 2015). The external environment is often characterised as unpredictable, where people have little control over it (Fulton et al., 2021). Furthermore, it comprises of multiple life domains which can affect individuals differently. Therefore, any area of life in the external environment can potentially hinder or bolster resilience in the face of adversity. The next section briefly explores how far resilience is a composite feature of trait, process, or outcome.

### **3.3.1. The Role of Trait, Process or Outcome in Enabling Resilience**

Within the context of human resilience, some researchers have emphasised the importance of understanding the traits that make up a resilient person (Bandura, 2006; Pan & Chan, 2007; Luthar & Cicchetti, 2000; Luthar et al., 2015; Reich et al., 2010; Smith et al., 2016; Tremblay, 2016). Among these are a sense of self or self-concept, psychological hardiness, emotional intelligence, and having meaning and purpose in life. Globally, indicators of these individual attributes are frequently discussed in the broader literature of resilience in adults (Adegoke, 2015; Bandura, 2006; Pan & Chan, 2007; Liu et al., 2018; Luthar et al., 2015; Reich et al.,

2010; Smith et al., 2016). These traits are viewed as core building blocks of a resilient personality that can protect individuals from several adverse outcomes and promote longer-term positive psychological outcomes such as positive affect, more significant psychological adjustment, and satisfaction with life (Smith et al., 2016; Thompson et al., 2011). There is broad applicability of these apparent resilience attributes within the South African environment and social context. The research work of Cooper (2007), Nkomo (2015), Sarra and Berman (2017) and Wolhuter (2015), has revealed that many of those who faced significant adversity for standing up against the injustices of the apartheid system would not have survived without the resilience needed to cope with adversity.

### 3.3.1.1. An Illustration of Resilience from a South African Political [Apartheid] Perspective

Given that the current study is located in South Africa, a country with a history of legislated racial separation [commonly called apartheid], the South African socio-political context may be regarded as essential benchmarks of circumstances under which the workplace environment could affect resilience for women in HEIs. South Africa ranks at the very top of all forms of social challenges and stressors that impact negatively on the health and well-being of women in HEIs (Bitzer, 2009; Council on Higher Education, 2016b; Clarke et al., 2015; Nkomo, 2015). The examples of traits indicated in section 3.3.1 provided many historically disadvantaged social groups in South Africa with a will to live and enhance adaptation to a new life following the apartheid era (Cooper, 2007; Mapesela & Hay, 2005; Sarra & Berman, 2017). The classic example of the role of these traits in resilience is that of the prominent South African leader Nelson Rolihlahla Mandela, the first president of South Africa in the post-apartheid era (Cooper, 2007; Nkomo, 2015; Sarra & Berman, 2017; Wolhuter, 2015). During his 27 years of imprisonment, Mandela experienced a plethora of challenges in his fight for freedom and a better and more just society for all South Africans. Despite the extraordinarily difficult challenges in the apartheid era, Mandela and many other freedom fighters who were catalysts for social justice and equality in South Africa excelled. One of the significant consequences of South African democracy is that it reduced or eliminated many of the political, economic, and social challenges faced by disadvantaged racial groups and women. Some of the post-apartheid outcomes relate specifically to the significant access gained by minority groups and

women to higher education and employment, giving women rights of participation in the South African economy.

### 3.3.1.2. An Illustration of Resilience from a Concentration Camp Perspective

The well-known Austrian neurologist and psychologist, Viktor E. Frankl, who survived four Nazi death camps as a prisoner, effectively used his experience to promote the notion that the ability to cope with the emotional distress caused by unavoidable suffering is embedded in humankind's attitude to personal existence. Stories of adversity in the Nazi death camps and the prisoners' inner strength were presented in Frankl's (1946, in German) book, *Man's search for meaning*. As Frankl recalled his experiences, he could state: "There is nothing in the world, I venture to say, that would so effectively help one to survive even the worst conditions as the knowledge that there is a meaning in one's life" (Frankl, 1992: 47). Frankl (1992) goes on to argue that those who are unable to identify the specific meaning of their lives at a given moment, may have a diminished ability to rise above the sufferings of the moment. "One could make a victory of those experiences, turning life into an inner triumph, or one could ignore the challenge and simply vegetate, as did a majority of the prisoners" (Frankl, 1992: 36). He proposed the psychotherapeutic theory of logotherapy, and was among the first to point out that the successful pursuit of meaning in one's life was a key ingredient for a happy life. A basic tenet of logotherapy has been to help individuals to make meaning of unavoidable suffering, and not to focus on pleasure gaining, or avoiding pain (Frankl, 1992; Kinnear., 2014; Reich et al., 2010). In terms of Frankl's theory, if people see meaning in life despite their suffering, they will be less vulnerable to mental health issues. This also suggests that meaning-making of life's adversities changes with people's development over time and at varying stages of life.

## 3.4. CONCEPTS OF ADVERSITY, RISK, VULNERABILITY, AND CHALLENGE

Having considered broad definitions of the resilience construct, the researcher now turns to some of the more salient constructs revealed in the above definitions of resilience. These constructs include adversity, risk, vulnerability, and challenge. These concepts are an embedded part of the nature of psychological resilience. As such, they should be distinguished

before delving into key illustrations on how these constructs lay at the heart of the issues that contribute to FAs' experiences of resilience.

Adversity refers to a state of hardship or suffering associated with misfortune, trauma, distress, difficulty, or a tragic event (Jackson et al., 2007: 3). That is, it refers to an event perceived as a threat or challenge, and can also be used interchangeably with the terms: adverse condition, unfavourable situation or circumstance, and a demanding experience (Cortina et al., 2016; Jackson et al., 2007; Kent et al., 2015 2015; McDonald et al., 2016). When people speak of adversity, they usually mean risk which indicates an elevated probability of an undesirable outcome (Luthar & Cicchetti, 2000; Masten & Tellegen, 2012; Reich et al., 2010). Luthar and Cicchetti (2000: 858) posit that adversity [or risk] typically encompasses unfavourable life circumstances that are known to be statistically associated with adjustment difficulties. Thus, the experience of adversity can raise many concerns, whether adversity is situated within the world of work or home domain of the individual. Concerning workplace adversity, Jackson et al. (2007: 3) defined it as any negative, stressful, traumatic, or difficult situation or episode of hardship that is encountered in the occupational setting. While it is accepted that in some instances experiencing adversity may increase the likelihood of negative outcomes, it is suggested that adversity produces potential/significant positive outcomes (Crane & Searle, 2016; Gartland et al., 2019; Lazarus & Folkman, 1984; Lunt et al., 2007; Luthar & Cicchetti, 2000; Rees et al., 2015). When people do not have some sense of control over events in their lives, they can generally experience unfavourable outcomes (Reich et al., 2010; Taylor, 2013). However, having control over adverse events can lead to positive outcomes in people (Cadete, 2017; Mulqueen, 2014; Reich et al., 2010).

With this regard, the literature suggests that the extent to which adversity impacts people differs according to their feelings of vulnerability (Brown, 2012; Reich et al., 2010). Rutter (1987 cited in Reich et al., 2010: 7) defines vulnerability as the “intensification ... of the reaction to a factor that in ordinary circumstances leads to a maladaptive outcome”. In other words, without developing the right attributes of resilience, it is more difficult for individuals to substantively affect their life circumstances, leaving them more vulnerable to workplace environmental adversity. Vulnerability indicates how exposed the individual is to a stressor (Brown, 2012; Tytherleigh., 2007). Vulnerability is, therefore, an integral and essential part of the resilience

process in which a person's perceptions or cognitive appraisal of the adversities experienced stimulates the person's reactions to such adversities (Fletcher & Sarkar, 2013; Fulton et al., 2021; Reich et al., 2010; Shrivastava & Desousa, 2016).

It is generally recognised that people are more likely vulnerable to negative outcomes during exposure to adverse events (Broekman, 2011; Brown, 2012; Smith et al., 2016). The difficulties of having to deal with adversities within or beyond the work environment are unique for every individual. As might be expected, biopsychosocial factors play a significant role in how people respond to adversities. If at some point individuals' internal resources are weakened during an adverse situation, then, unfortunately, people become more susceptible or sensitive to the adverse outcomes. Thus, a person's reaction to adversity is regarded as complicated, as the type of reaction to adversity is linked to biopsychosocial factors that place individuals in a vulnerable position. There are various dynamics and building blocks required for a more resilient response to adversity. Therefore, based on the unique nature of biopsychosocial factors and differences of how these factors interconnect, there will be variations in how people react to adversities.

Furthermore, with adversity, people can also experience different degrees of adverse outcomes which can vary between mild symptoms to extreme symptoms of physical and psychological outcomes (Stacy & Schulkin, 2022; Yazawa et al., 2022). This process is critical because it also signals the degree by which people need to strengthen their internal and external resources so that they can recuperate. As a result of strengthened internal and external resources, inevitably when people are faced with adverse experiences and begin approaching their adversities from a developmental perspective, they may be less vulnerable to the effects of adversities (Masten & Tellegen, 2012; Reich et al., 2010; Stacy & Schulkin, 2022). This perspective also suggests that to experience resilience, a person must be exposed to risk or threat to activate the resilience response. Without risk or threat, one cannot experience resilience. According to Reich et al. (2010: 216), development [also referred to as 'positive adaptation'] can be defined in terms of internal function [e.g., psychological well-being, maturity, health] or external function [e.g., doing well in school or work, contributing to society], or some combination of both [happy and prosperous]. As people grow and develop,

they gain new understandings or perspectives of past experiences (Reich et al., 2010). In turn, this process enables people to interpret or reinterpret life's events.

As far as the theory of human resilience is concerned, the developmental perspective on adversity stands in direct agreement with the concept of challenge. Karaduman (2014), describes a challenge as something needing great mental or physical effort to be done successfully, or the situation of facing this kind of effort. The term 'adversity' tends to be generally perceived and understood as a challenge by individuals. Notably, the concept of challenge is predominantly person- and intra-personal specific. According to Kobasa (1982:07 cited in VanBreda, 2001: 41), challenge is based on the belief that change, rather than stability, is the normative mode of life. As noted earlier, the experience of adverse events is significantly influenced by a person's perceptions or cognitive appraisal of the adverse event. In this sense, the goal of perceptions or cognitive appraisal is to enable individuals to understand that they can influence their experiences of adversity and resilience. One of the advantages of resilience is that it stimulates positive perceptions and influences positive life experiences. This point is fundamental because it is despite the challenges imposed by adversities that opportunities for resilience development and enhancement can be provided. The next section briefly outlines the implications of resilience in the wider workplace context.

### **3.5. RESILIENCE IN THE WORKPLACE CONTEXT**

While resilience research has existed for many years, the early perspectives of human resilience may have neglected the workplace environment perspective to understand how professionals in different workplace settings experience adversity (Garmezy, 1991, 1993; Luthar, 1991; Luthar & Cicchetti, 2000; Masten, 2001; Masten et al., 1999; Rutter, 1985; Wagnild & Young, 1993). As such, taking into consideration that workplaces are unique in terms of their organisational culture and context (Reich et al., 2010), it is useful and relatively possible now to estimate what contextual risk and protective factors may potentially have an impact on individuals in such environment. As resilience theory advanced over the years, a strong emphasis has been placed on the larger picture of factors that promote and demote resilience in the workplace environment. The more recent workplace resilience research has had a particular interest in studying workplace environments in which employees are most likely to display overt signs of distress. It is unclear, however, which occupational settings track the

original basis and progression of resilience research among employees exposed to work-related adversities. However, what becomes immediately clear from the literature is that more people working within high-demanding occupations than people working in less-demanding occupations are increasingly displaying mental health problems (Lazarus & Folkman, 1984; Marshall & Morris, 2011; Robbins & Judge, 2013; Stacy & Schulkin, 2022; Tahghighi, 2018). Some of the occupational settings that fall within the rubric of highly stressful work environments include the medical or healthcare settings [e.g., medical doctors, nurses, and emergency service responders], the university settings [e.g., academics and support staff], and the military or police settings [e.g., soldiers, veterans, and police officers] (American Heart Association, 2017).

A fundamental difference between studies within these occupations is their theoretical framework approach to explaining the development and experience of resilience. Research work on resilience which focused on the biopsychosocial nature of resilience appears to be particularly useful in informing more holistic models of resilience [see: chapter four] (Broekman, 2011; Rees et al., 2015; Woods-Giscombe & Black, 2010). The bulk of studies on the biopsychosocial dimensions that may facilitate or inhibit the development of resilience in the wider working population has been conducted from a medical or healthcare settings perspective (Kent et al., 2015; Rees et al., 2015; Shrivastava & Desousa, 2016; Woods-Giscombe & Black, 2010). Moreover, doctors and nurses are frequently portrayed on the front line of the mental health and resilience debate. This likely explains why much of the literature within the working population has identified those working within the healthcare profession as typical examples of being resilient. For example, several authors have found that there is a strong relationship between witnessing tragedy, suffering and human distress, and experiencing secondary stressors or compassion fatigue associated with assisting others to overcome adversity (Cusack et al., 2016; Fida et al., 2018; Jackson et al., 2007; Pipe et al., 2012; Rees et al., 2015).

Furthermore, some researchers have also focused their attention on identifying the ways individuals whose work involved caring for those exposed to stresses that are uncontrollable such as the trauma of war, earthquakes, extreme poverty, severe chronic illnesses, and death, could cope with the stress themselves (Cusack et al., 2016; Jackson et al., 2007; Southwick et

al., 2014). For example, particularly concerning compassion fatigue and burnout [see Subsections 3.8.2 and 3.8.4] in the healthcare setting/environment, it is suggested that even healthcare practitioners who may show signs of resilience, may be limited in their capacity to act in a way that avoids compassion feelings and emotional exhaustion. These concepts are grounded in the resilience theory of individuals facing repeated exposure to distress. The next section explores the subject of mental health and its relevance to resilience in a workplace context.

### **3.6. MENTAL HEALTH AND RESILIENCE IN THE WORKPLACE CONTEXT**

The World Health Organisation (2018) recognises the importance of mental health at work. It defines mental health as “a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”. Concerns for the mental health and emotional well-being of employees in the workplace has been evolving over recent decades in Western countries, as researchers identify more and more workplace environmental factors potentially posing risks to mental health and well-being of people at work (Lunt et al., 2007; Pinnington et al., 2007; Reich et al., 2010; Rowley & Jackson, 2011; Van Breda, 2001; World Health Organisation & Calouste Gulbenkian Foundation, 2014). Researchers were able to develop methodologies and techniques to examine the evidence for mental health problems, as well as psychological resilience-related models to address work-related stress conditions at the individual level.

The workplace has significantly benefited from the evolution of the human resources management discipline since the Industrial Revolution of the late eighteenth and early nineteenth centuries, which has heightened the fact that work can impact people’s health positively or negatively (Rowley & Jackson, 2011). As work has evolved, social sciences researchers within the general workplace environment context begun to focus their attention on the significance of managing occupational health and safety of people at work, emphasising the values of mental and physical health at work. The emergence of occupational health and safety policies have permitted researchers to investigate how specific WEFs across different categories of workplaces and aspects of the individual [biological and psychological] are related with positive and negative mental health outcomes (Crane & Searle, 2016; World

Health Organisation & Calouste Gulbenkian Foundation, 2014). If people do not have mental and physical health, people will be more vulnerable to experiencing suffering. With the rapid increase of sedentary work in recent years, employers are under considerable pressure from health agencies, both nationally and globally, to accommodate common mental and physical health problems at work.

Given the stigma surrounding mental health problems both nationally and globally, particular emphasis is given to mental health versus physical health outcomes (Stacy & Schulkin, 2022). The level of intolerance that society display towards those who are seen as having mental health condition such as anxiety and depression further complicates matters for those whose work environments provide no protective support in this regard. Within the workplace adversity context, the stigmatisation of mental health means that those employees who experience anxiety and depression due to WEFs may suffer or choose to suffer in silence (Schoeman, 2017). As is the case with the process of overcoming adversity, the experience of resilience, (as will be seen later in the chapter), involves the experience of mental health issues, including anxiety and depression. Unless there are enough clear policies, programmes, and guidelines at the governmental and corporate level that support mental health issues and the development of resilience interventions to better help individuals enhance internal resources, avoiding mental health stigmatisation is difficult.

### **3.6.1. Mental Health and Resilience in Academia**

In recent years, a great deal of mental health research has been extended to the university workplace context (Gray et al., 2017; Johnson & Lester, 2022). The argument, of course, is whether FAs experience mental health problems due to WEFs; and if so, the extent by which psychological resilience can be protective against potential mental health problems for FAs (Flaxman et al., 2012 & Kinman, 2012; Gray et al., 2017; Naseem & Khalid, 2012; Savigny, 2014). According to Gray et al. (2017), sustaining healthy mental health seems to be exceptionally fundamental for people in teaching positions who may be more likely to experience burnout due to the high level of social interactions. While university teaching is a central aspect of South African HEIs (Callaghan, 2015), it is characterised as a profession that is emotionally taxing and potentially frustrating (Ferman, 2011; Rickinson, 2011). Gray et al. (2017) explain that high levels of burnout particularly with teaching are an issue that can affect

both early academics with teaching roles and more experienced academics alike, because they face the same level of skill and workload expectations. Additionally, the process of teaching means that academics must assist students to cope with various learning challenges actively (Yang et al., 2021; Zhang, 2021). This in turn, has the potential to threaten or drain one's internal resources, thereby requiring enormous reserves of mental health energy (Flaxman et al., 2012), and result in lecturers feeling a persistent sense of emotional and mental exhaustion (Tunguz, 2014). For example, teachers who continue to work despite experiencing burnout exhibit an elevated and negative, work-related state of mind which can be persistent and lead to student apathy (Bezuidenhout & Cilliers, 2010; Gray et al., 2017; Zhang, 2021). Poor mental health can show itself in many forms, including irritability, high absenteeism, increased cynicism, and weaker classroom management skills (Bezuidenhout & Cilliers, 2010; Gray et al., 2017). Thus, a focus on the risk factors and adverse outcomes in the HEIs context promotes different protective factors and positive outcomes (Ferman, 2011).

Currently, there is limited literature on the psychological resilience of South African women within the HEIs' perspective. Few studies of women within the South African HEIs context have been undertaken mainly in relation to mental well-being (De Klerk et al., 2012; Mabaso & Dlamini, 2018; Williams, 2017), linking the well-being of FAs to work environmental factors. As Mabaso and Dlamini (2018) have observed, the work environment in South Africa HEIs presents significant risks to the well-being of women. Conceptually, it is a misnomer to talk about the concept of psychological resilience without also talking about the concept of well-being at work (Bezuidenhout & Cilliers, 2010). This is because growing research evidence suggests that increased psychological resilience results in overall well-being at work. Therefore, many contemporary researchers often cohere around the question of the link between resilience and well-being at work (Ferman, 2011; Salimzadeh, 2017; Sojo et al., 2016; Southwick et al., 2014). In fact, in a plenary panel at the 2013 meeting of the International Society for Traumatic Stress Studies, Doctor Catherine Panter-Brick described resilience as "a process to harness resources to sustain well-being" (Southwick et al., 2014). Thus, perhaps another way of discussing mental well-being and resilience at work is by tying these outcomes in with job satisfaction. A sense of resilience, well-being, and job satisfaction implies the presence of protective factors (Blowers et al., 2022; Cadete, 2017; Mabaso & Dlamini, 2018; Rees et al., 2015; Williams, 2017). Moreover, as Sojo et al. (2016) have argued, no individual

should have to be subjected to harmful experiences at work to the extent of impairing their job satisfaction and deteriorating their psychological well-being. Ideally, paid work should be the means for a better life and for improving the well-being of individuals and their family. Ironically, however, although it is a commonplace in the academic world that academics work well beyond their paid hours, without the protective factors necessary for job satisfaction, better life and well-being for women academics are not possible.

Protective factors such as receiving coaching support (Rickinson, 2011), fair practices in the remuneration of work allocated (Mabaso & Dlamini, 2018), career progression and work-life balance (Williams, 2017), and having mentors and social support available (Bernabe & Botia, 2016; Boateng, 2018), are said to enhance women's sense of well-being, and job satisfaction in HEIs workplaces. The absence of these protective factors can increase the likelihood of adverse life outcomes which can be fundamentally problematic for women in academia. With regards to mentorship and social support, for example, in a Ghanaian study of women in academia, Boateng (2018) found that it is much more difficult for FAs to develop mentors and social networks within the university in comparison to male academics, due to the general acceptance of gender-roles stereotypes in male-dominated university cultures. The researcher also noted the fact that even women academics who were heads of their departments reported feeling excluded from male networks, as they perceived they were treated with indifference and apathy by colleagues, superiors, and even subordinates.

As argued by some other researchers, when individuals experience more difficulties to overcome adversities, it suggests that they are more likely to be using reactive, rather than proactive resilience coping mechanism (Lunt et al., 2007; Robbins & Judge, 2013; Roncaglia, 2014; Smith et al., 2016), thereby indicating that they have not fully achieved psychological adjustment.

### **3.7. NMHOs VIS-À-VIS WEFs IN HEIs**

In recent years, there has been an increasing amount of literature on public health intervention with a particular focus on mental health (Fida et al., 2018; Flaxman et al., 2012; Herbert et al., 2014; Graves et al., 2016). Non-government agencies and organisations are also very critical role-players on guiding health-risk prevention policies in the workplace, and creating general

awareness, through research, of the importance of promoting mental health (World Health Organisation, 2018, 2019b; World Health Organisation & Calouste Gulbenkian Foundation, 2014). The concept of mental health underpins psychological resilience which is the focus of this study. The concept of health was first extended from the individual level to both the individual and group levels by the World Health Organisation [WHO] in 1986:

Health is defined as the extent to which an individual or group is able, on one hand, to realise aspirations and satisfy needs; and, on the other hand, to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, a dimension of our 'quality of life', and not the object of living; it is a positive concept emphasising social and personal resources, as well as physical capabilities (WHO, 1986 cited in Boothroyd & Eberle, 1990: 3).

In terms of the context of this study, the WHO definition of health underpins the role of organisations [i.e., HEIs] in addressing the increasing demand for academic staff mental health support (Delgado-Gallegos et al., 2021; Johnson & Lester, 2022). Given that negative risk factors lead to mental health illnesses, thereby perpetuating the negative mental health status of women in academia, it is opportune to contribute to this current discussion. Negative mental health outcomes [NMHOs] refer to the adverse effects of stressors and adversity on the longer-term mental health and functioning of individuals (Crane & Searle, 2016). Negative mental health outcomes are strong indicators of psychological distress characterised by symptoms such as burnout, depression, anxiety, stress, compassion fatigue, caused by a variety of risks which a person can become exposed to (Rees et al., 2015). The risks associated with WEFs in HEIs can have profound mental health consequences for FAs.

Negative mental health outcomes [NMHOs] have become a global issue in modern-day workplaces, and are generally seen as being strongly associated with adversity-related experiences. Today, NMHOs are seen as universal, serious, costly, and challenging for individuals, families, communities, and organisations (American Heart Association, 2017; Schoeman, 2017; Sojo et al., 2016; World Health Organisation, 2019b). Consequently, these stakeholders can affect or be affected by NMHOs due to WEFs. Generally, in the workplace, people may begin experiencing NMHOs for a variety of reasons, such as pressure from the workplace environment, and pressures from the home environments [the WEFs examples

discussed in chapter two demonstrate the adversities that contribute to NMHOs in women in academia].

Negative mental health outcomes [NMHOs] in adults also can relate to other issues including schizophrenia, obsessive-compulsive disorder, and dementia (Garmezy & Streitman, 1974; World Health Organisation & Calouste Gulbenkian Foundation, 2014). Several researchers note that empirical studies of adult resilience were historically confined to the field of medicine, and focused on understanding why some adults can lead relatively normal lives despite being diagnosed problematic conditions such as schizophrenia, which impairs thought, emotion, and behaviour (Academy of Medical Sciences, 2008; Barlow & Durand, 2005; Garmezy, 1977; Shrivastava & Desousa, 2016). Schizophrenia is defined as the “startling disorder characterised by a broad spectrum of cognitive and emotional dysfunctions including delusions and hallucinations, disorganised speech and behaviour, and inappropriate emotions” (Barlow & Durand, 2005: 455).

A summary of the importance of positive mental health for people in society was captured by Krsangi Radhe (2019: 19) in her lifestyle column, “No health, without mental health”. In seeking to answer the question, “What is mental health?” Radhe asserts that:

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we relate to stress decision-making and our interaction with others. Having solid mental health does not necessarily mean that one is permanently happy. All it means is that you have the necessary tools and sound mind to be resilient in times of distress. This is so important because when you feel down and anxious the body tends to shut down too. However, if the mind is strong and focussed, stress and tough times can be better handled.

It is important, therefore, to explore the various indicators of distress which might be experienced by FAs due to WEFs. Below is a detailed discussion of the different NMHOs which the model of resilience employed in this study [discussed in chapter four] seeks to address.

### **3.7.1. Stress in the Context of WEFs in Academia**

In the context of HEIs, resilience is especially needed when negative psychological outcomes due to work-related challenges are seen as impacting the well-being of FAs. Generally, individuals who display extreme signs of distress are more likely to be suffering from one or more of the fewer mental health conditions this study reviews. One of the critical questions asked by this study was: “To what extent do female academics experience NMHOs such as stress, depression, anxiety, burnout, and compassion fatigue due to WEFs?”. Embedded in this question is the issue of whether a type of NMHOs influences another type of NMHOs. It is almost certain that the overall answer is, yes. When the concept of stress is contrasted with the concept of burnout, depression, anxiety, and compassion fatigue, it becomes evident that stress is a central variable influencing human experience. Which is why stress fits both classifications as either healthy or unhealthy [i.e., negative]. Since it is assumed that unhealthy stress leads to more negative outcomes, then anxiety, depression, and compassion fatigue are potential outcomes borne from unresolved stress.

Stress is a primary area of interest within the field of HEIs. The literature suggests that stress is an increasing concern for academics with teaching roles primarily because of the increased workload which has resulted in teachers no longer enjoying the traditional flexibility of teaching hours and tasks (Barrett & Barrett, 2010; Ferman, 2011; Hodgson, 2017; Leibowitz et al., 2014; Murray & Male, 2005; Naseem & Khalid, 2012; Subbaye & Dhunpath, 2016). Flexible working hours interventions are designed to increase or strengthen working people’s ability to control where, when, and how their work gets accomplished (Robbins & Judge, 2013). However, being able to bring work home, may also be dangerous if women are unable to set clear boundaries between family life and work. For example, one study in Iceland examined the structuring of time among academic parents to determine whether any gender differences in time use could be found (Rafnsdóttir & Heijstra, 2013). The researchers suggest that social life and time are socially constructed and linked to power. In the study, a sense of power and control over time were measured through the participant’s responses to the question of whether and to what extent high work-related flexibility produced its intended consequences of more effective time management and work-family balance. Evidence from the semi-structured in-depth interview study of 20 women and men academics in Iceland indicated that despite flexible working hours, women [rather than the men] reported not having influence or

control over their time due to their domestic and child caring responsibilities. The authors uncovered some interesting insights: the academic women participants mentioned more often than the academic male participants that they used the time flexibility at work to be on call for the family because it was their primary obligation. None of the interviewed academic male parents described their own liability for having children or having heavy family workloads as the women described.

The researchers also interviewed the life partners of both the women and men academic participants. A somewhat surprising finding was that the wives of the academic men in general seemed to be knowledgeably aware of the endless academic work, and be more sympathetic towards their partners' academic work than the husbands of the women academics. The researchers concluded that although flexible working schedules can improve the work-family balance of women academics, the issue of gender role and reproduction of unequal gender power can be accentuated by work-related flexibility. Referring specifically to the level of work flexibility that the women academic participants reported having to balance their work and family life, Rafnsdóttir and Heijstra (2013: 288) can state:

Even though the participants mention that the flexible working schedules and telecommuting improve their work and family balance, it turns out that those work characteristics lengthen their workday and prevent them from spending time with their family without having work-related issues on their mind all the time.

Psychological, biological, social, environmental, and individual factors have been identified as significant sources of stress for people (Lian & Tam, 2014; Naseem & Khalid, 2012). A stressor, therefore, is a derivative of the word 'stress' and can emerge from any of these stress sources. As discussed in chapter two, there are eight [8] WEFs in the context of this study, which could affect FAs' resilience. The factors earlier discussed [see: Figure 2.1] are recognised as potential sources of stress and indeed constitute a great contributor of resilience theory for the resilience of women in academia. As defined by Lazarus and Folkman (1984 cited in Naseem & Khalid, 2012: 1) stress is "a state of anxiety produced when events and responsibilities exceed one's coping abilities", or put more simply, "the body's response to changes that create taxing demands" (American Addiction Centre, 2019: 1).

Researchers divide stressors into two different and often contrasted categories: acute stressors and chronic stressors (Lian & Tam, 2014; Naseem & Khalid, 2012; Stacy & Schulkin, 2022). Acute stressors tend to be severe stressors, but last a shorter period. Chronic stressors tend to be more persisting or recurring and last for a more extended period of time (Stacy & Schulkin, 2022). As the name suggests, chronic stressors are more likely to pose formidable challenges to women than acute stressors. Therefore, it can be assumed that women experiencing chronic stressors are more likely to be vulnerable to other forms of NMHOs such as burnout, depression, and anxiety than individuals suffering from acute stressors. The literature suggests that ordinary acute stressors can quickly turn into chronic traumatic stressors in knowledge-driven work environments. Academics are likely to experience recurring stress when they are unable to meet their academic WEFs expectations/goals/objectives. Although globally, HEIs are drawing attention to the importance of including women academics in higher echelons of the university, resilience support platforms are not as strongly notable or emphasised as the critical skills that women need to acquire to deal with the challenges that come with the job.

In a research study by Tytherleigh et al. (2007) it is suggested that despite similar levels of stress reported among male and FAs, FAs reported higher levels of vulnerability to WEF-related stress. Worldwide, there is increasing medical evidence to support the view that many physical health conditions can result at least in part from chronic stress. Some of the more common health conditions resulting from stress include migraine, hypertension, arthritis, asthma, ulcers, and insomnia.

### **3.7.2. Burnout in the Context of WEFs in Academia**

Burnout has long been considered a serious concern for both women and men in the workplace (Cadete, 2017; Coetzee et al., 2019; Lunt et al., 2007). However, generally, it is unclear what the real source of burnout is. The recent classification of diseases by the World Health Organisation [WHO] indicates that burnout is no longer classified as a medical condition. Burnout is now classified as a workplace syndrome, emphasising the need for psychological resilience interventions in HEIs (World Health Organisation, 2019a). More specifically, the World Health Organisation (2019a) described burnout as a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed.

The above classification and definition of burnout suggests that burnout is not a new concept in hectic occupational settings. Therefore, it is necessary to understand its connection to the workplace environment. The clinical concept of burnout was first introduced by Herbert Freudenberger in 1974 to describe precisely an event whereby “individuals become incapable of fulfilling the requirements of their jobs due to the close and frequent interactions with the people they meet as an indispensable part of their job, which finally lead to emotional exhaustion” (Freudenberger, 1974 cited in Bilge, 2006: 1151–1152). This resulted in several rich conceptual models of burnout which refined the original definition. Burnout is defined as, “the situation manifesting itself with the changes in attitude and behaviour related to the job, expressed as physical, mental and emotional exhaustion, which finally gives rise to lower personal accomplishment” (Maslach & Leiter, 1997 cited in Bilge, 2006: 1152). Put simply, burnout is “a state of complete emotional, physical and mental exhaustion” (Lunt et al., 2007: 102).

As far as symptoms and health implications, burnout can be classified into three distinct influencers of negative behaviour and experience. These are emotional exhaustion, depersonalisation, and lower personal accomplishment. According to Bilge (2006: 1152), emotional exhaustion, is a concept which has much in common with reduced job satisfaction, and is defined as “loss of energy, the feeling of being psychologically overloaded and the loss of individual’s emotional resources” (Bilge, 2006: 1152). Depersonalisation is defined as “the individual’s treatment of the persons to whom she/he is providing service in a negative, rigid or indifferent manner” (Bilge, 2006: 1152). Lower personal accomplishment is defined as “relatively losing the feelings of being successful and adequately qualified, and believing that the efforts she/he has been making are in vain” (Bilge, 2006: 1152). Although burnout can be experienced in different occupational settings, studies suggest that there is an association between burnout and professions that require high interpersonal interactions. For example, professions such as education, health and social work produce some of the highest recorded cases of burnout (Coetzee et al., 2019). Accordingly, there are abundant occupational health studies carried out with staff in these fields of work.

Research on the decelerating factors that impact on the career progression of women academics at Stellenbosch University has uncovered examples of recognising the impacts of neglecting one's own self-care and overall health affected by excessive workloads. In the study, a participant reported:

I must be honest; I would first think of my family; how any job would impact on my family. I still want to see my children, I still want to nurture them, I still want to be around them. If I hear that a job is going to take 24 hours of my day, I'll refuse to do that job (Williams, 2017: 25).

By increasing resilience, it is expected that FAs might take more proactive roles in maintaining healthier states, and do not quickly succumb to unhealthy responses which compromise mental health.

### **3.7.3. Depression and Anxiety in the Context of WEFs in Academia**

Some forms of stressors are more likely than others to be perceived as more challenging. Stressors perceived as more challenging may demand more inner strength, the absence of which, may lead to unhealthy responses to stressors. As Broekman (2011: 2) has observed:

Although stress reactions can be useful to adapt to situations, prolonged or severe stress reactions can be maladaptive, and can lead to symptoms of posttraumatic stress, depression, and/or can have an influence on cognitive functioning.

Depression is thus considered to be an unhealthy psychological response to stress affecting the quality of life of academics. Other responses to stress, as suggested by Naseem and Khalid (2012: 5) include anger, frustration, hostility, and irritation.

The World Health Organisation (2017b) defines depression as a “common mental disorder, characterised by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks”. Anxiety was among some of the symptoms of depression summarised by the World Health Organisation (2017b). Some of the other symptoms of depression include: a loss of energy; a change in appetite; sleeping more or less; reduced concentration; indecisiveness; and restlessness. All

these have been described in the literature as typical, but potentially harmful symptoms of anxiety. Thus, as far as resilience is concerned, a person experiencing depression is likely to experience anxiety, and vice-versa.

The role of neurochemicals can explain this association. According to Reich et al. (2010: 38):

When faced with unexpected, sudden stressful events, the brain responds by releasing catecholamine and other stress hormones that prepare the organism to cope with the situation and avert harm to the organism.

The word catecholamine or dopamine refers to a vital neurotransmitter which causes some forms of depression when it reaches low levels (Möller, 2008). With this concept in mind, Southwick et al. (2014) further clarify the role of catecholamine/dopamine in stimulating resilience response, when they state, “when something really life threatening, some fear-inducing event says, ‘you are in big trouble, do something’, that’s when initially the catecholamine kicks in and we prepare ourselves for flight or fight response” (Southwick et al., 2014: 9).

Anxiety can be described as a negative mood state characterised by bodily symptoms of physical tension, and apprehension which is experienced in the face of current events [or in anticipation of future events] (Folkman & Lazarus, 1988; Luthar, 1991; Nilsen et al., 2016; Reich et al., 2010). Several researchers report that anxiety is a psychological condition which is very hard to study in humans due to its subjective nature (Bandura, 1977; Rees et al., 2015; World Health Organisation & Calouste Gulbenkian Foundation, 2014). Many scholars suggest that both positive or negative events can cause people to feel anxious about the event (Du Plessis, 2020; Robison, Gath, & Unsworth, 2016; Stone, 2019). In some instances, feeling anxious is considered useful for getting individuals motivated and taking appropriate actions in times of pressure. It is when individuals experience [unhealthy] feelings of anxiety regularly that anxiety becomes a harmful mood state, hence the term ‘anxiety disorder’ (Anagnostopoulos & Botse, 2016; Draper-Clarke & Edwards, 2016; Lazarus & Folkman, 1984; Roncaglia, 2014; Stone, 2019; Thompson et al., 2011). People with a severe anxiety or an anxiety disorder tend to perceive events that are least likely to lead to adverse outcomes as

being highly stressful. In many instances, anxiety can cause individuals to experience very aversive and unpleasant stimuli and lead to compulsive behaviour or panic attacks.

Depression and anxiety have been reported widely in the literature as interrelated concepts influenced by basic biological processes. As indicated earlier, it was only recently that burnout had been classified as a serious mental health condition by the World Health Organisation. According to the World Health Organisation (2017b), depression is a treatable condition which can be normalised with talking therapies or antidepressant medication, or a combination of these. Accordingly, the concepts of depression and anxiety have often yielded strong medical bases for explaining individual behaviour at the onset of chronic stress; and so are often viewed as more severe forms of mental health conditions compared to burnout and compassion fatigue.

It has been suggested that levels of depression and anxiety are associated with self-critical perfectionism in academic staff. Self-critical perfectionism has been described as a personality attribute characterised by the setting of excessively high personal standards for performance, accompanied by an overly critical and rigid pattern of self-evaluation (Flaxman et al., 2012: 855). Their study has been able to demonstrate academics labelled low self-critical perfectionists experienced much lower levels of stress and in turn reported lower levels of fatigue, emotional exhaustion, and depression and anxiety issues. The study also demonstrated that even after returning from work respites, academics who were labelled high self-critical perfectionists were unable to experience more prolonged benefits from the respite from work and reported higher levels of fatigue, emotional exhaustion, and anxiety issues. The main reason for such difference as explained by the researchers is that: “Self-critical perfectionists tend to experience excessive concerns about making mistakes and a vague sense of doubt about the quality of their actions and decisions” (Flaxman et al., 2012: 855). They also noted that a self-critical perfectionism tends to doubt the quality of their actions more often (Flaxman et al., 2012: 858). For academics in such situations, this means increased perceived inadequacy, being unable to move toward desired goals, and experiencing difficulties in managing feelings of guilt (Draper-Clarke & Edwards, 2016; Kakarala et al., 2018).

From a clinical perspective, the literature on depression and anxiety is clear that individuals, health institutions, and society at large should act more resiliently towards the maintenance of

mental health. Reich et al. (2010:07) have posited that, “depression and anxiety may be added to the list of indicators of load that, once elevated, does not fall back to normal levels for some people”. From a financial perspective, the financial burdens that NMHOs place upon individuals and their organisations are enormous. A recent report from the World Health Organisation (2019b) indicates that depression and anxiety cost the global economy an estimated US\$ 1 trillion per year in lost productivity. The World Health Organisation (2019b) has estimated that 264 million people in workplaces globally suffer from depression, with many of these people diagnosed with depression also suffering from symptoms of anxiety. According again to the World Health Organisation (2019b) depression causes individuals to fall victim to disability. In attempting to raise awareness of mental health issues and mobilise efforts in support of better mental health, from 2017, the World Health Organisation has dedicated the date of 10 October each year to the theme ‘World Mental Health’.

#### **3.7.4. Compassion Fatigue in the Context of WEFs in Academia**

Rees et al. (2015) describe compassion fatigue as a type of occupational burnout which is significantly associated with caregiver stress and is thought to occur as a result of expressing constant empathy and compassion to others, while neglecting one’s self-care. Three critical points from this description, namely occupational burnout, caregiver stress, and neglect of one’s self-care also apply to the academic work contexts. As noted above, the term ‘burnout’ has been used to refer to a negative psychological outcome resulting from chronic workplace stress that has not been successfully managed. The inability to manage stress successfully may constitute low capacity for self-regulation, self-control, self-efficacy, and coping. In this sense, resilience resources may need to be strengthened. Although compassion fatigue is recognised as affecting the healthcare professionals; academic staff, in general, are also known to require to demonstrate a great degree of care for other people. Academics perform a great deal of work which requires them to engage with others on a personal emotional level. The social construction of gender theory discussed in chapter two has elucidated some of the key gender-stereotypes that exist around women roles in society.

Women in academia, for example, are expected to play a more caring role in understanding others emotions, resembling a kind and protective motherly figure (Kamerlin & Wittung-Stafshede, 2020; Mayer et al., 2017; Van Veelen & Derks, 2021). As Idahosa (2019: 11) has

noted: “mothering roles and responsibilities which are not recognised or rewarded by university structures sometimes lead to the expectation of ‘leniency and/or partiality’ in tandem with the expectation of a ‘real mother’, but those who refuse to take on such roles are often vilified”. These gender-stereotypes can clearly yield significant risks for compassion fatigue in FAs. With regard to the third theme, the literature abounds with evidence that women compared to men in academia are more likely to take on additional supervised work and skewed workplace tasks and often volunteer [or have no options but] to take primary roles and responsibilities in the home front [such as caring for children, spouse, other family members and attending to routine domestic duties] (Awung & Dorasamy, 2015; Fowler, 2019; Marsay, 2020; Sougou et al., 2022). It is then not surprising that women may be inclined to relent care to other people, while postponing or neglecting self-care.

Compassion fatigue, also known as secondary traumatic stress or burnout, proved an important finding in earlier and more current studies investigating the individual psychological resilience of staff in the healthcare sector (Elkonin & Vyver, 2011; Rees et al., 2015; Stamm, 2010; Tahghighi, 2018). However, more research on this topic reveals that staff in HEIs, especially the academic staff, are increasingly reporting feelings of burnout due to increased workloads associated with interpersonal relations with other individuals. The best-known example of academic staff likely to experience compassion fatigue is that of academic staff with the role of academic advisors and counsellors within the university. The primary responsibility of these academics [whose visiting students/clients usually expect to receive empathy, genuine care, and compassion from] is to provide quality advising support. For example, Ali and Johns (2018) have asserted that continually having to witness and absorb the difficulties of students has caused academics to experience emotional, physical, and spiritual exhaustion over time. Some of the key difficulties of students reported as contributors to burnout and as secondary traumatic stress in academic advisors and counsellors are unmanaged stress, untreated mental health conditions, imposter syndrome, or need for advice on juggling study/learning schedules with other family or work-related responsibilities. It should be no surprise, then, that some symptoms of compassion fatigue may relate to those of chronic stress, burnout, depression, and anxiety. For example, academics suffering from chronic fatigue may experience sleep disturbances, appetite changes, hypervigilance, pervasive negative attitudes, and isolation or withdrawal (Ali & Johns, 2018).

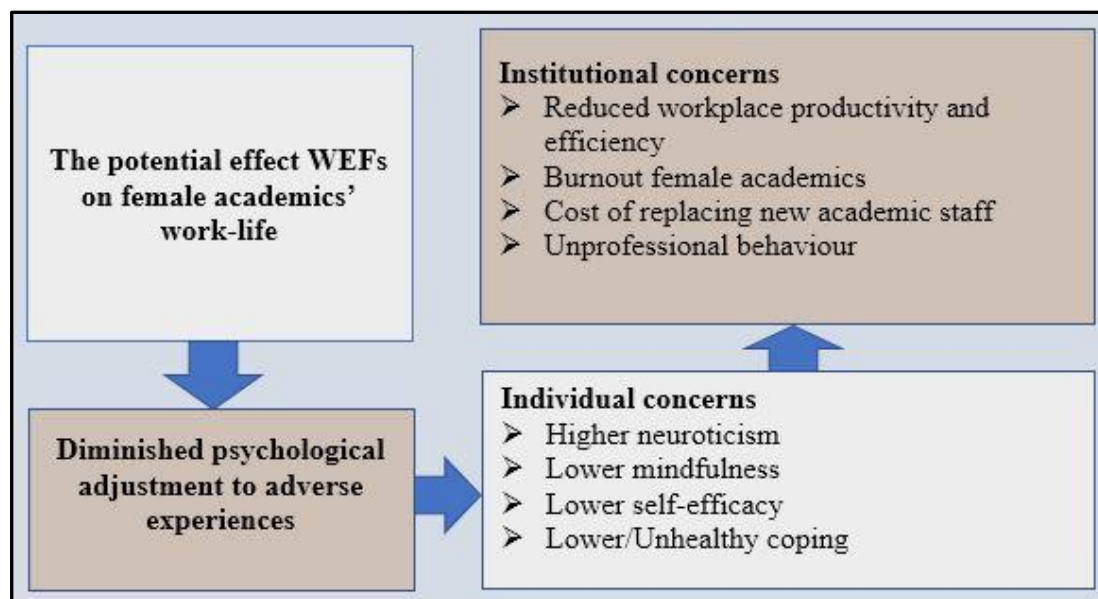
Another evident example of the influence of compassion fatigue in HEIs concerns the need for academics to get involved in interpersonal relationships with fellow academics other than students. To classify a female academic person as fatigued or being significantly affected by another individual, the female academic in question must be exposed to a traumatised individual. Professions that require a good deal of social interactions require a certain level of social relatedness. Social interactions respond primarily to feelings of empathy, compassion, and friendship (Mayer et al., 2017). These feelings can pose as primary risk factors to individuals who may not be naturally inclined to display these feelings, but who may be required to learn to demonstrate these feelings as part of the job. Those whose job requires assisting others [as it is with some FAs], might also be expected to react to the personal crises or adversities that others may face.

Given that the nature of academic work requires that academics establish professional networks, it is necessary to keep in mind that at some point academics might experience pressures related to the process of maintaining professional relations with colleagues in their own academic fields and establishing new networks with academics from different fields. It is not unusual that professional relationships in occupations such as academic work can involve a give-and-take approach whereby ‘going the extra mile’ to assist others becomes a necessary part of the job. As noted earlier, a significant issue facing HEIs is gender advancement. Across academic research and practice, there is the assumption that well-networked academics occupy high-status roles [e.g., associate professor and full professor roles]. The opposite assumption can also be made. In other words, weak-networked academics occupy high-status roles [e.g., lecturer and senior lecturer roles].

Even though the level of awareness around the concept of compassion fatigue in South Africa HEIs is still an emerging one, there is a strong consensus among researchers in the field of psychology that interpersonal relationships have the potential to yield increased satisfaction. Therefore, managing negative relationships to reduce the symptoms of compassion fatigue in FAs requires us to conceptualise a more positive construct of compassion known as compassion satisfaction. This construct, which is linked to resilience, has been broadly defined as feeling satisfied because of being able to assist others, or having the ability to do the work

well (Tahghighi, 2018: 39). Hence, it has been emphasised that individuals whose work involves actively interacting with other people to whom they have no concrete connections, should develop the ability to manage emotions to minimise the risk of developing compassion fatigue (Tahghighi, 2018; Tong, 2009).

Figure 3.2 illustrates how the NMHOs influenced by WEFs, discussed in the previous sections, might impact FAs’ overall psychological/mental health as well as their respective HEIs environments.



**Figure 3.2. Potential Effects of Adverse WEFs for Female Academics and HEIs**

The illustration indicates that because of insufficient psychological resilience traits/resources, FAs could experience negative psychological adjustment to WEFs-related NMHOs. Lack of resilience further hinders the ability of FAs to effectively carry out work tasks and contribute to overall institutional performance. The NMHOs created by WEFs might become more apparent with women’s increased experiences of family stressors and lack of family-supportive work environments. The next section outlines work-life balance/imbalance issues that may affect FAs in HEIs.

### **3.8. WOMEN'S WORK-LIFE BALANCE/IMBALANCE AND NMHOs**

Historically, researchers have not been concerned with describing the ways in which factors outside of the workplace environment could affect women at work (De Klerk et al., 2012; Donnelly et al., 2016; Idahosa, 2019; Maphalala & Mpofu, 2017; Williams, 2017). In the past, researchers believed that work stressors permeated the individual family-life more easily than family stressors permeated work-life (De Klerk et al., 2012; Mrčela & Ignjatović, 2013; Van Breda, 2001). For this reason, researchers mainly focused on understanding work-to-family as opposed to family-to-work conflict. Today, however, it is believed that the stressors arising from the family domain can significantly influence the work-life of the individual, causing family-to-work conflict. Specifically, the personal life domain is believed to contribute significantly to the pressure women face when their non-work life context crosses the boundaries of the workplace domain (Callaghan, 2015; Love et al., 2022; Salehi et al., 2014). Not surprisingly, the broader literature of women at work continues to raise questions around work-life balance/imbalance.

Given the increased focus and attention placed on women's issues of work-life balance/imbalance globally (Council on Higher Education, 2016b; Kotze, 2003; Shober, 2014), the current study also briefly considers factors outside of the work environment which may contribute to the context of the resilience of FAs. Although the literature demonstrates that female employment in South Africa has increased over the past decades (Bitzer, 2009; Boshoff, 2005; Council on Higher Education, 2016b; Shober, 2014), the history demonstrates that no significant efforts have been made towards assisting women to become more resilient individuals in their ability to balance the demands of both work and family (Callaghan, 2015; Maphalala & Mpofu, 2017; Moodly, 2015; Williams, 2017; Wolhuter et al., 2013).

Work-life imbalance occurs when working individuals fail to successfully navigate between the challenges that come with work-life and the challenges that come with home-life (Buddhapriya, 2005; Lian & Tam, 2014; Nilsen et al., 2016). The term 'work-life imbalance' is also used interchangeably with the term 'work-family conflict' (Grice et al., 2007; Innstrand & Grodal, 2021). Conversely, when working individuals, can successfully navigate between the work life and home life challenges, these individuals are said to have work-life balance (Lian & Tam, 2014; Toffoletti & Starr, 2016; Webber, Sarris, & Bessell, 2010).

The quality of work-life of women has concerned feminists for many years (Rafnsdóttir & Heijstra, 2013; Toffoletti & Starr, 2016; Tong, 2009; Williams, 2017). Tong (2009) has pointed out that with the rise of feminist theories, several weaknesses related to androcentrism within the workplace have also been exposed. Androcentrism permeates institutional structures and leads to increased vulnerability and difficulty for women to make progress with their career goals/aspirations. Research on gender roles reminds us of the power of social constructions of work and the extent to which such constructions might contribute to the maintenance of adversity for women in academia. As a result of the socially constructed roles of women in society, women are more likely than men to be affected by the so-called triple burden of trying to manage family activities, home activities, and workplace activities (Maphalala & Mpofo, 2017; Mrčela & Ignjatović, 2013; Savigny, 2014; Shung-King et al., 2018). Thus, feminist research has played and continue to play a critical role to speak for women who cannot entirely escape or avoid their socially-constructed identities.

As some scholars have noted, some women may choose to succumb to society's expectations to assume the traditional role of navigating between being home keeper, wife, mother, and caregiver (Gabryelska, 2021; Karam & Afiouni, 2013; Stamarski & Hing, 2015; Tong, 2009). By contrast, men are generally less likely to engage in non-work tasks. Consequently, it is largely assumed that women, particularly in the case of women with active work-family roles, may be more likely to experience prolonged exposure to compassion fatigue and burnout (Mayer et al., 2017; Sojo et al., 2016). This is not to say that women with no children or family roles may not be confronted with potential sources of stress in their lives [or even in the intrapersonal context] (Kent et al., 2015), nor is this to suggest that working individuals [men or women] without an increased level of home/family related do not face adversities. For the individual to have a balanced professional and personal life, it often requires the exercise of resilience and the ability to access external support as they navigate between work-life and home-life adversities.

### **3.8.1. The Positive Side of the Work-Family Interface**

The research of De Klerk et al. (2012) has focused on work-family interface positives. These scholars suggest that the work domain and the non-work domain [i.e., family domain] may

have beneficial and reciprocal effects on one another. However, despite this recognised link, very little has been researched on the influence of resilience on FAs who increasingly face greater work-life challenges. The South African literature relating to the positive work-family interface in the South African population is limited when compared to literature in the Western and European countries. De Klerk et al. (2012) have attributed this lack of data to the fact that South African researchers employ measuring instruments which have targeted specific contexts in the Western and European population to measure unique contexts of the work-family interface in the South African population. Researchers are cautioned to employ methods that consider South Africa's unique contexts so that research is a true reflection of the South African population.

Indeed, the effects of multiple roles [i.e., work-life roles and family life roles] on women's health are not always adverse, and can indeed generate positive outcomes. The benefits of academic work include independent income generation, professional and personal development opportunities, work flexibility, work satisfaction, and positive interpersonal relationships. Additionally, at an emotional level women can experience positive outcomes from the family/non-work life domain. Being a mother, bringing up young children, and being able to support a family can be experienced as positive and essential personal goals to accomplish, which makes it an intrinsically rewarding experience for women (Rafnsdóttir & Heijstra, 2013; Shoher, 2014; Sougou et al., 2022). However, these generally positive aspects of family life, are also described as challenging aspects of family life for women. That is, attending to other people's needs and having different kinds of caring responsibilities can be emotionally and physically exhausting. Work-life is especially challenging if women have little power over their working time, workloads, have weak support at work, or outside the work environment (Innstrand & Grodal, 2021).

According to Walt et al. (2011), the challenges faced by academics in the developing countries have been aggravated because of external evaluations and rigid promotion systems since the beginning of the twenty-first century. As a result of the international academic boycott, South African universities were isolated from international trends. This meant that South African academics had to make sudden and forceful changes to HEIs management systems post-1994 to improve its quality of tertiary education. According to Rafnsdóttir and Heijstra (2013), time

is an essential resource which empowers people to manage and control their work-life duties and achieve maximum performance. As a resource, it is essential that the scarcity or depletion hypothesis, which suggests that an individual has a limited amount of time, is highlighted (Lyness & Judiesch, 2008). In other words, with increased or increasing external pressures, women with multiple roles may not have the time needed to cope with demands. A sense of lack of time may result in women forcing different activities into the same period (Rafnsdóttir & Heijstra, 2013).

In addition to time resource limitations as a cause of decreased autonomy, work-life and family-life may also require a considerable amount of energy, and physical and mental equilibrium. As Ferman (2011) has pointed out, many academics have frenetic working lives. In other words, the absence of these critical resources may present academics with more obstacles to carry out the most prominent activities. It is one thing to wish for more time and more work-life balance, but quite another to cope optimally with different work-life role expectations (Grossman et al., 2016; Lazarus & Folkman, 1984; Turner & Maschi, 2014). It has been argued that, as expectations of academic work have increased over recent years, women face the constant dilemma of having to choose between their professional lives and fulfilling society's expectations to give priority to their family duties (Toffoletti & Starr, 2016). For example, as women become parents, their work-life can be interrupted because of childbearing and childrearing (Grice et al., 2007; Rafnsdóttir & Heijstra, 2013). In addition, work-life can become more stressful as women with family responsibilities attempt to keep up with responsibilities at work to promote their career progression (Cheesebrough et al., 2020; Grice et al., 2007; Rafnsdóttir & Heijstra, 2013; Van Veelen & Derks, 2022). Rafnsdóttir and Heijstra (2013) therefore argue that given that women are more likely to internalise and assume non-work roles, women's time is dominated by other people's demands. The greater the ability of women of finding and sustaining healthy work-life balance, the greater their ability to respond to challenges or adverse situations in their work-life. For example, it is asserted that employees are more likely to remain with their current employer if their employer provides support that helps them deal with personal life challenges (Ferman, 2011; Juhdi et al., 2010; Krivokapic-Skoko & O'Neill, 2008; Stamm, 2010).

It appears likely that having resilience interventions readily available will have a considerable impact on the lives of women, especially in times of stress. This is clearly illustrated by the work of Ion (2014). Her study of women academics in the Argentinian HEIs context provides a picture of the different factors which contribute to the career development of women researchers. The study reports that fourteen academic women took part in the study, and most of the participants were senior professors, and only one was a lecturer. Ion (2014) illustrated the power of a supportive and effective environment in shaping the research careers of women in her qualitative exploration of women in Catalonian public universities. The author reports that the women academic participants found it increasingly hard to fulfil the three obliged roles of teaching, research, and management simultaneously. According to Ion (2014), it was important for the women researchers in the study to establish horizontal networks between women group members who worked in the same field of knowledge. The study also reported that women found it helpful to relate their teaching work with their research work, thus allowing each area to reinforce and improve the other area. Another interesting finding was that some of the participants in the Ion (2014) study, reported positive correlations between supervising Master's and Doctoral research projects and academic career development. In short, women academics might appear to rate their teaching and research activities as positive factors as far as adequate institutional support is available.

Yet, if FAs often carry double home and work responsibilities, as discussed in this last section, they may inevitably take on the 'negative' part of caring for people in and outside of the workplace environment as they repeatedly witness and observe others experience distress (Donnelly et al., 2016; Emslie & Hunt, 2009). It has thus become apparent that WEFs-related NMHOs within HEIs, reflect not only the absence of organisational capacity or institutional support, but also a general absence of individual resilience capacity in FAs to overcome adversities within and outside of the workplace environment.

In many ways, and to a great extent, the variations in the experiences of resilience for women in the workplace, lie not only with their personal attributes, but with how their academic work roles are shaped by their employer's efforts to ensure good work conditions and promote workforce resilience. Hence, as Southwick et al. (2014) point out, it is necessary to consider differences in WEFs between different types of workplace environments as they may shape

differences in experiences of adversity and resilience. A long-held assumption in the resilience literature in the workplace context has been that the absence of overt displays of distress or vulnerability, strongly indicates that the person might operate in low-stress work environments (Luthar & Cicchetti, 2000; Reich et al., 2010; Sojo et al., 2016). The current perspective, in contrast, reveals that the absence of overt signs of distress in the face of significant adversity is potentially related to poor mental health (Anagnostopoulos & Botse, 2016; Pan & Chan, 2007; Sojo et al., 2016).

People with psychological injuries or mental health illnesses may also be confronted with the stigmatisation of their vulnerabilities. Hence, those who tend to endure adverse outcomes covertly [i.e., display little or no distress] may be seen as following the norms of acceptable organisational behaviour (Robbins & Judge, 2013; Sojo et al., 2016). This further suggests that individuals who may deviate from the norm may become stigmatised and discriminated against. Given this reality, people may be discouraged from engaging in behaviour that can reveal negative mental health issues. However, some researchers warn against this and highlight the importance for workplaces to put in place systems that encourage employees to seek institutional support whenever individuals experience either overt or covert forms of adversities (Boateng, 2018; Ion, 2014; Reich et al., 2010). Overt distress is said to give warnings of potential adversities that can lead to potential resilience interventions which could influence a person's positive response to an imminent adverse event (Reich et al., 2010). It is also important to emphasise, however, that many individuals who fail to display signs of distress in the face of workplace adversity, may genuinely be mentally healthy and not be trying to inhibit negative feelings and emotions.

### **3.9. CHAPTER SUMMARY**

In summary, this chapter has explored and provided a synopsis of the theory of psychological resilience. It has also discussed related theories of resilience to conceptualise the resilience experiences of academic women in the South African context. The resilience of women academics is likely to be affected by adverse workplace WEFs. The extant research on FAs in SA is primarily focused on identifying issues of gender equity, work-life balance, and academic productivity output.

The discussion in the chapter emphasises that the absence of organisational interventions to tackle the direct effects of WEFs on women is at the heart of the critique against the patriarchal norms and values in workplaces such as HEIs. Despite this reality, the chapter emphasised that a heightened awareness of the challenges imposed by patriarchal norms and values, could also create significant opportunities for HEIs to provide sufficient development of individual resilience interventions for women in academia in general. It has also been explained in the chapter that such circumstances, might provide opportunities for women to develop coping abilities to deal with the outcomes of WEFs, and overcome the burden of negative mental health outcomes.

The view that frequently, women are more likely than men to experience NMHOs has been a central concern in this study. Hence, the chapter has offered a fresh impetus for understanding the potential adverse effects of WEFs on women in academia. With increasing evidence that WEFs play a larger role in creating conditions that lead to issues such as stress, anxiety, depression, burnout and compassion fatigue, this chapter demonstrated that HEIs should be supportive of resilience interventions for FAs. Another key argument this chapter has made is that, in many instances, the experiences of NMHOs, such as compassion fatigue or emotional exhaustion may be aggravated by the social constructions of gender roles that may tend to disadvantage FAs in HEIs.

An overview of the literature on the model of resilience employed in this study, which centres around the integrative role of biological, psychological, and social dimensions of resilience, is provided in the next chapter four.

## **CHAPTER FOUR**

### **THE BIOPSYCHOSOCIAL PERSPECTIVE OF RESILIENCE: A THEORETICAL MODEL TO PROMOTE RESILIENCE AMONG FEMALE ACADEMICS**

#### **4.1. INTRODUCTION**

The previous chapter provided a brief historical introduction to the concept of resilience and provided a synopsis of key concepts which relate to negative mental health outcomes [NMHOs] due to workplace environmental factors [WEFs], and which serve as theoretical foundations for the resilience model used in this study. Globally, various models of resilience are used to explore and understand the resilience trajectories of individuals within the workplace environment. While researchers cannot provide a one-size-fits-all model on the factors influencing individual resilience, researchers elucidate relevant concepts and processes that can promote resilience in certain adverse circumstances. Overall, research studies suggest that resilience research should take a biopsychosocial approach to investigate resilience in the work context. Specifically, this approach entails assessing the links and interactions between biological, psychological, and social or contextual variables to achieve a deeper and more profound understanding of resilience. The peer-reviewed model of resilience proposed by Rees et al. (2015), offers a useful framework for exploring the experiences of resilience of female academics [FAs] in the university under investigation. The proposed resilience model, advocates biopsychosocial factors, namely neuroticism, mindfulness, self-efficacy, and coping as critical factors in promoting resilience outcomes in a work context.

The current chapter therefore focuses its attention on the model of individual workforce resilience by Rees et al. (2015) and examines the key factors of resilience that may contribute to resilience among FAs against the NMHOs discussed in chapter three. The chapter begins by describing the background and role of the biopsychosocial perspective of resilience which is embedded in the model of resilience. This entails exploring and explaining the foundational links and interactions between the biopsychosocial dimensions, namely biological, psychological, and social dimensions in relation to resilience. Following this is a review of the concepts of neuroticism, mindfulness, self-efficacy, and coping present in the model of resilience employed to assess resilience of FAs. An important objective of this study was to explore the resilience components in the model of resilience by Rees et al. (2015) because they

are assumed to apply to people's experiences of resilience within different types of workplace environments such as HEIs. Consequently, the review involves a discussion and examination of how the building blocks of resilience shape the resilience experiences of FAs within the context of dealing with HEIs' WEFs-related NMHOs.

#### **4.2. THE BIOPSYCHOSOCIAL APPROACH TO EXPLORING PR IN SOUTH AFRICAN HEIs**

Much of what is known about human resilience is a result of extensive research conducted by biological, psychological, and social-cultural research professionals (Pan & Chan, 2007; Engel, 1977; Kent et al., 2015; Lunt et al., 2007; Reich et al., 2010). A view among resilience researchers which has become prevalent is that resilience is ultimately subjective to the interaction between the internal and external domains of the individual (Juhdi et al., 2010; Lunt et al., 2007; Melchert, 2013; Pillay, 2020; Reich et al., 2010; Van Breda, 2001; World Health Organisation, 2017a). As stated by Reich et al. (2010: 215), "resilience arises from many processes and interactions that extend beyond the boundaries of the individual organism, including close relationships and social support". In 2017, the World Health Organisation [WHO], which is considered one of the prominent global advocates for mental health, has asserted that "there is now widespread agreement that resilience is not a given personal, unmodifiable characteristic with which one is born. Rather, it is the result of a developmental process that can become stronger over time, according to circumstances" (World Health Organisation, 2017a:07).

Psychological resilience [PR] is increasingly gaining attention in the South African literature of HEIs, showing positive relationships with desirable work-life outcomes [i.e., psychological adjustment]. However, studies in the South African academic occupational arena have paid limited attention to the extent to which biopsychosocial factors of resilience may increase the resilience of academics, thereby influencing more positive physical and psychological outcomes. This is a significant limitation in the literature of academic workplace, because as has been highlighted in the previous chapter, several research pioneers have identified academic workplace WEFs as major causes of experiences of adversity in which the quality of WEFs promote negative psychological outcomes in FAs (Boateng, 2018; Lian & Tam, 2014; Shober, 2014; Smith et al., 2016; Thompson et al., 2011).

Reich et al. (2010: 222), reports on the work of Masten (2006) who explains that “from the perspective of development, trajectories of resilience in life are assumed to reflect many processes and interactions across multiple levels of function, from cells to central nervous system, to family, school and other complex social systems”. It can thus be conceivably hypothesised that a biopsychosocial approach would identify how NMHOs interact with biopsychosocial variables that are believed to be linked to resilience. The biopsychosocial approach, initially established by Engel (1977), represents a holistic way of understanding “clinical observations that could not be wholly accounted for by the biomedical model of disease” (Lunt et al., 2007: 51). As far as the occupational health domain is concerned, the biopsychosocial approach has been identified as being fundamental in explaining the aetiology and progression of health conditions such as burnout, stress, anxiety, and depression [or NMHOs]. Consequently, the current study takes a holistic perspective to resilience regarding resilience as being an outcome of the interplay between [a] biological; [b] psychological; and [c] social factors/dimensions. What follows is an account of each of these domains.

#### **4.2.1. The Biological Dimension of Resilience**

The biological dimension, which is strongly embedded in the biopsychosocial model of resilience, tends to be used in the literature to refer to a stress-risk vulnerability dimension. This dimension is influenced by genetically-acquired predisposing factors or by developing an emotional sensitivity which can be observed when individuals are exposed to risk factors. For example, suppose a person has a propensity to experience NMHOs. This may be because of their genetic make-up, that as such, is a tendency that may run in the family of the individual concerned (Broekman, 2011; Liu et al., 2018; Lunt et al., 2007; Rees et al., 2015; Shrivastava & Desousa, 2016). A person’s genetic make-up is generally seen as a factor strongly related to neuroticism. That is, a propensity to feel and act in a non-resilient manner (Rees et al., 2015). For example, regularly feeling tense and nervous towards individual life experiences, the inability to control intense emotions, promptly reacting to adverse events, or the inability to cope or develop coping capacity. It is recognised that such a propensity may vary from individual to individual in proportion to how significant a person perceives the adverse event as either threatening or non-threatening. This assertion reveals a need to explicitly outline the term psychological as it applies to women in HEIs.

#### **4.2.2. The Psychological Dimension of Resilience**

The psychological dimension broadly refers to the effective cognitive functioning or process which influence a person's perceived sense of control over their environments (Bandura, 2006; Liu et al., 2018; Lunt et al., 2007; Melchert, 2013; Rees et al., 2015; Reich et al., 2010). This dimension can be described as the cognitive make-up and functioning of an individual which impact their behaviour, thoughts, and emotions; and contributes to resilience (Rees et al., 2015). Bandura (1994), coined the term 'cognitive processes' as thinking processes involved in the acquisition, organisation, and use of information. This concept has become an integral part of the rationale of resilience in connection to the issue of knowledge application discussed earlier in chapter two. Moreover, since it is recognised that resilience is not established by a person's biological make-up or person's current affairs, the ability of individuals to apply knowledge of resilience results in a more psychologically skilled and able individual when it comes to coping with challenges.

As was mentioned in the previous sub-section, individuals vary in how they assess and interpret events as being potentially threatening or non-threatening. The psychological dimension, therefore, predicts how likely individuals might express negative or positive behavioural tendencies in the face of adversity by assisting them understand and interpret life events. Persons who might, for example, tend to experience NMHOs due to a genetic predisposition (Broekman, 2011), have a higher necessity to develop better cognitive skills and abilities [i.e., cognitive reappraisal] for adaptation to stress-risk situations (Shrivastava & Desousa, 2016). Conversely, a poor cognitive reappraisal is likely to delay resilient actions from individuals facing unfavourable events regardless of whether the individual in question has some genetic predispositions to experience NMHOs. As Reich et al. (2010: 56) have noted, "a change in the environment signals particular genes to turn on and off; pumping iron signals genes to turn on processes to build muscle mass". A typical case example is the university environment at UKZN, where FAs from distinguished academic fields and campus, may perceive and respond differently to adverse WEFs across UKZN's five campus environments. Overall, there seems to be some evidence to indicate that psychosocial practices such as mindfulness, self-efficacy, and coping, play a prominent role in building psychological muscle that results in resilience (Rees et al., 2015). It is now necessary to explain how the social domain links to the biological

and psychological domains to help influence the resilience of FAs in the face of highly stressful WEFs.

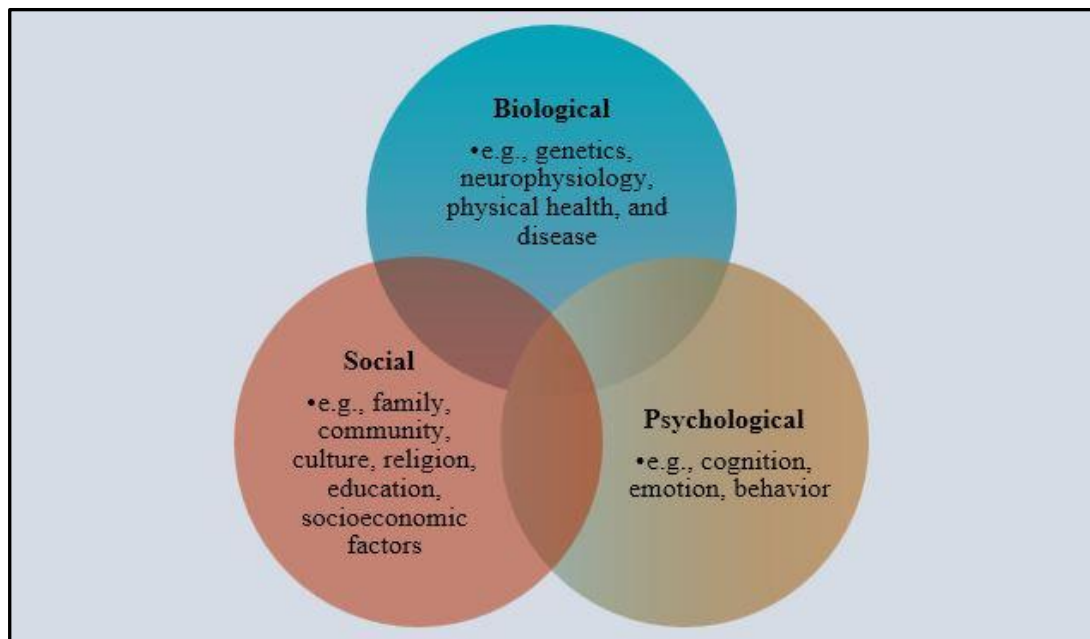
### **4.2.3. The Social Dimension of Resilience**

The social dimension can be regarded as a branch of resilience which is mainly concerned with how social networks enable individuals to maintain positive well-being and influence resilience (Lunt et al., 2007; Rees et al., 2015; Van Riel, 2016; World Health Organisation & Calouste Gulbenkian Foundation, 2014). Unfortunately, the tendency has been to emphasise social support from a non-professional networking perspective, and not to recognise the benefits of professional networking as a form of social support. As was mentioned in the previous chapter, due to the global internationalisation of academia, academic professionals need to build and maintain professional networks and contacts with other professional academics, primarily in terms of the proficiency and growth of their own academic careers, but more importantly, for social connection and psychological growth (Bernabe & Botia, 2016; Lunt et al., 2007; World Health Organisation & Calouste Gulbenkian Foundation, 2014).

This presents a need to highlight the difference between professional networks and personal networks, and show their link to the social aspect of PR. Professional networks tend to be more academic/intellectual/work-based, driven by career outcomes, including job satisfaction and advancement (Hermanowicz, 2016; Maphalala & Mpofo, 2017; Schoenberger, 2014). On the other hand, personal networks are more family/strength/support-driven, focusing on maintaining personal achievements such as an enhanced appreciation of life and a deepened sense of spirituality (Clarke et al., 2015; Elg & Jonnergård, 2010). The latter point accords with numerous observations in the literature focused on women's work-life balance which shows that the family domain was fundamentally crucial to women's well-being (Buddhapriya, 2005; Sojo et al., 2016; Webber et al., 2010).

As Figure 4.1 shows, professionals like FAs can [if available] obtain social support from different sources. For example, family, religious and community [i.e., neighbours] circles are well-known to provide two fundamental types of social support: emotional resilience and emotional adjustment. Such factors support the notion that procuring positive insights from one's parents, spouse, or siblings, might help minimise the potential negative outcome of

significant adversity, thereby promoting the resilience of women in academia and beyond. Building psychological and social resources has the potential to have great resilience benefits not only to FAs who may or may not be genetically predisposed to NMHOs. It also adds value to the general well-being of academic staff, by enhancing their ability to cope with unforeseen negative consequences of WEFs developments (Council on Higher Education, 2016b).



**Figure 4.1. The Biopsychosocial Approach to Understanding PR**

Source: Adapted from: Melchert (2013: 9)

The above discussion regarding the application of biopsychosocial dimensions confirms that one-dimensional approaches are not a particularly effectual or instructive means toward understanding resilience as a process. Consequently, a multi-dimensional approach to examining resilience is a more effective way of broadening our knowledge about the factors that contribute to resilience. Hence, in terms of the model in Figure 4.1, resilience is more likely to ensue when biological vulnerabilities are minimised, and psychosocial factors are strengthened.

It is only by assessing resilience through a biopsychosocial lens that we can conclude that the environment of a workplace can have an impact on a person's physical, emotional, and psychological well-being, either positively or negatively. While a variety of definitions of the

term ‘resilience’ have been suggested previously in this section, this study emphasises two recent definitions of resilience suggested by Shrivastava and Desousa (2016) and Gartland et al. (2019: 1). While Shrivastava and Desousa (2016: 38) describe resilience as “the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state”, Gartland et al. (2019: 1) see it as a “positive developmental outcomes in the face of adversity or stress, being relatively resistant to psychosocial risk experiences and the development of competence despite chronic stress”. These two definitions appear to be useful and applicable for this study because they provide a snapshot of aspects of resilience which relate to the three primary hypotheses of resilience [i.e., trait, process, or outcome] discussed earlier. The above discussion thus demonstrates that the integration of biopsychosocial aspects of human life can provide a useful framework to conceptualise psychological resilience in the context of HEIs. The next sub-sections will examine the theories of neuroticism, mindfulness, self-efficacy and coping as distinct, yet interdependent influences of resilience.

#### **4.3. A THEORETICAL MODEL OF RESILIENCE VIS-À-VIS WEFs IN ACADEMIA**

Recently, Rees et al. (2015) developed a theoretical model of workplace psychological resilience which integrates biopsychosocial dimensions as potential enablers of resilience that can lead to positive outcomes primarily for healthcare professionals. By applying the resilience model of Rees et al. (2015) to professionals from other occupational contexts, this study can explore the concepts of neuroticism, mindfulness, self-efficacy, and coping, to understand the extent to which these resilience factors influence FAs’ positive adaptation or psychological adjustment [in relation to HEIs’ WEFs-related NMHOs].

As indicated previously, stressors can be encountered in any workplace environment, and can range from ordinary acute stressors to severe stressors. Generally, workplace stressors are considered to yield positive benefits (Crane & Searle, 2016; Datt & Washington, 2015). The suggestion is that resilience resources can either be challenged [i.e., improved] or hindered [i.e., reduced] by the very same job-related factors or WEFs. The literature distinguishes two different psychological stress outcomes, i.e., distress and eustress, which in turn generate two classes of stressors. Firstly, distress is the stress type which concerns negative stress and is

driven by stressors that are perceived as hindrance stressors (Crane & Searle, 2016). Hindrance stressors are “job demands that tend to be viewed as barriers to goal accomplishment and are therefore considered inhibitory to personal growth” (Crane & Searle, 2016: 469).

Unlike distress, eustress is the stress type which represents positive stress and results from stressors that are perceived as challenge stressors (Crane & Searle, 2016). Challenge stressors, therefore are “job demands that tend to be viewed as stressors that create an opportunity for personal growth and development” (Crane & Searle, 2016: 469). According to Crane and Searle (2016: 470) eustress “anticipates the necessity of the stress experience for positive growth outcomes”. Although extensive research has been carried out on negative and positive stress, researchers express caution in ruling out what could be viewed as an objective category of negative and positive stress. According to the American Addiction Centre (2019), developing an objective frame of stressors is difficult because people have different reactions to events and situations. A key question that is often asked in relation to how people respond to stress at work is: “What do people want from their jobs?” This question led the psychologist, Frederick Herzberg to develop his motivation-hygiene theory [also called two-factor theory] (Robbins & Judge, 2013: 205). Table 4.1 illustrates some of the critical factors serving as the likely causes of distress and eustress to employees in a workplace setting such as academia.

**Table 4.1. Illustrations of Internal Sources of Distress and Eustress at Work**

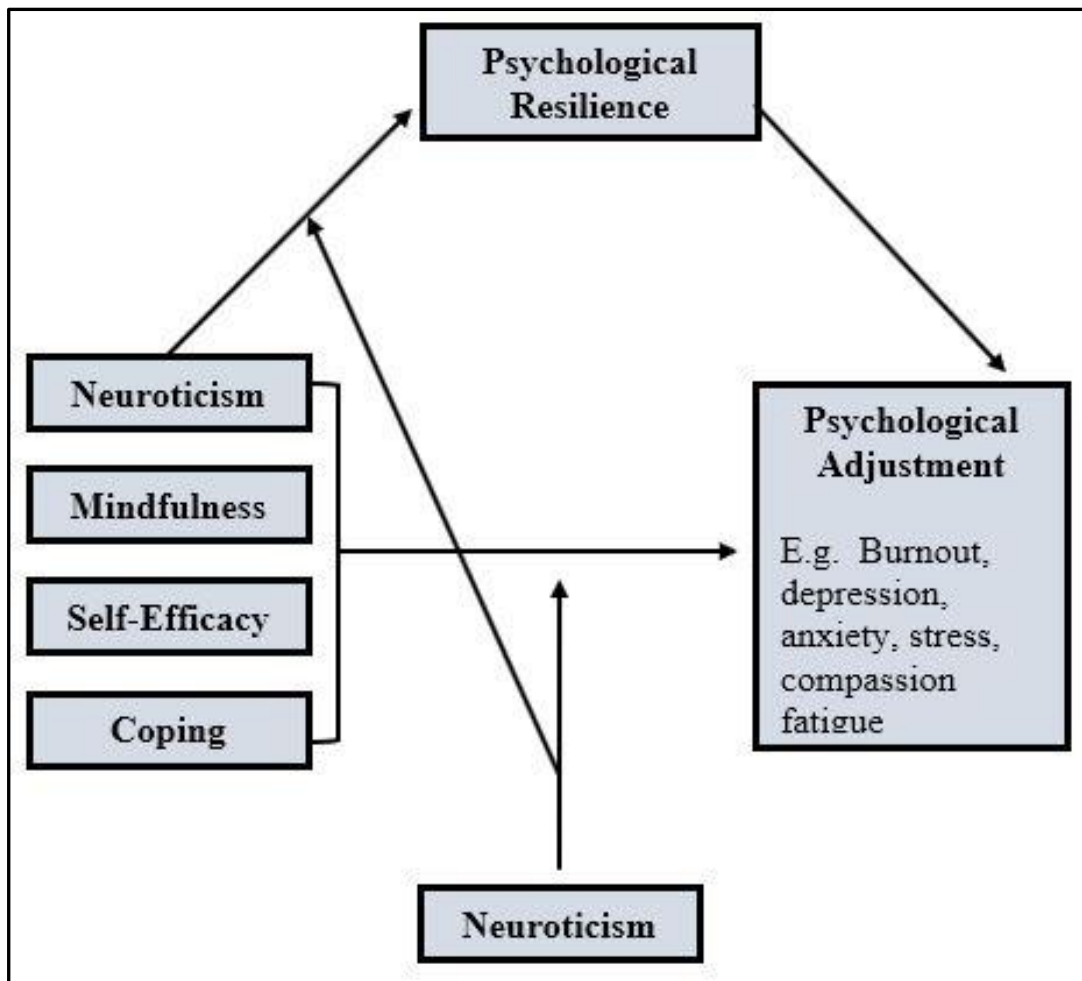
Internal Sources of Distress [Negative Stress]	Internal Sources of Eustress [Positive Stress]
<ul style="list-style-type: none"> <li>• Multitasking</li> <li>• Supervision</li> <li>• Deadlines</li> <li>• Workloads</li> <li>• Peer Pressure</li> <li>• Work Place Diversity</li> <li>• Administrative/paperwork</li> <li>• Excessive team projects</li> </ul>	<ul style="list-style-type: none"> <li>• Challenging Responsibilities</li> <li>• Recognition [in Terms of Rewards, Awards and Promotion]</li> <li>• Intellectual Tasks</li> <li>• Involvement in Multi-Projects</li> <li>• Achieving KPI's [Key Performance Indicators]</li> <li>• Accountability</li> <li>• Leadership Roles and Growth Opportunities</li> </ul>

Source: Adapted from: Datt and Washington (2015: 133–134)

Building on the seminal work in 1982 of Dr Hans Selye, Crane and Searle (2016: 469) proposed “that it may be stressor type, rather than strength, that was critical to determining whether a stressor resulted in good stress or bad stress”. It should be kept in mind that institutions do not operate without a workforce. Thus, it is only common-sense that institutions such as HEIs are

cognisant of the possible adverse impacts that WEFs can imbue in their academic staff. Therefore, in line with the above, it is suggested that resilience has a mediating role between the WEFs-related stressor and NMHOs, whereby the WEFs-related stressor may contribute to either an increase or decrease of resilience, and consequently the experience of NMHOs. This suggestion points to the prominent role of the human resources management [HRM] of HEIs such as adequate training, development, and mentoring and/or coaching interventions which can be incorporated into workplace resilience-friendly policies and strategies. The strategies through which HRM can facilitate increased sources of eustress in FAs can serve as a basis for managing work-related burnout, depression, anxiety, and compassion fatigue.

Given that a negative stress reaction or a positive stress reaction is contingent on the type resilience resources an individual has available (Crane & Searle, 2016; Datt & Washington, 2015), it is significant to distinguish the salient building blocks of resilience, and understand how FAs response to stressors might be influenced by HRM practices. The following resilience model depicted in Figure 4.2 illustrates the underlying theoretical framework of resilience dimensions in which the effect of workplace environment stressors can [hypothetically] be mediated through HRM resilience interventions.



**Figure 4.2. The Model of Individual Workforce Resilience**

Source: Rees et al. (2015: 4)

For Rees et al. (2015), the constructs of resilience incorporated in this model of resilience represents four variables, namely: independent variables, dependent variable, mediating variable, and moderating variable. Neuroticism, mindfulness, self-efficacy, coping represent the independent variables; and psychological adjustment represents the dependent variable; psychological resilience represents the mediating variable, and neuroticism plays a secondary role, representing the moderating variable.

Workplace stress and mental health interventions each have a role in improving the chances of resilience in FAs affected by WEFs-related adversity. Human resource management [HRM] practitioners, academic staff, and psychological resilience researchers should collaborate with HRM policy-makers within HEIs in developing policies and interventions to support the

resilience of staff. Human resource management practitioners need to be mindful of the various concepts involved in promoting resilience to incorporate in resilience interventions. Such interventions include support in the form of neuroticism training, mindfulness training, self-efficacy training, and coping training.

#### **4.3.1. Neuroticism as Part of Resilience in Academia**

Extensive research on adult resilience followed by pioneering developmental psychologists and psychiatrists during the 1970s on children has long established that individuals differ in relation to how they respond to adversities. Moreover, researchers today are still intrigued by the question “why are some people more or less likely to be resilient following exposure to potentially traumatic events”? (Reich et al., 2010: 207). The key point is that people have a natural capacity to bounce back from stressful events, whether the stress resulting from work is acute or chronic. At the level of predicting resilience behaviour at work, researchers across different fields recognise five critical personality traits, namely: extraversion, agreeableness, conscientiousness, neuroticism, and openness, also known as “the big five” (Mayer et al., 2016; Robbins & Judge, 2013; Robison et al., 2016). Of these, neuroticism is at the heart of our understanding of NMHOs development, and refers to the “tendency to experience enduring negative emotional states such as anxiety, guilt, anger and depression more frequently, intensely, and readily, and for a more enduring period of time” (Rees et al., 2015: 3).

Not unexpectedly, society has learned to label individuals appearing troubled, agitated, or nervous, as neurotic individuals. Rees et al. (2015) argue that there are two central roles played by neuroticism in the model. They argue that during exposure to an event of a stressful nature, a person’s emotional state changes, thereby revealing the person’s levels of resilience, while also revealing the person’s capacity to self-regulation which develops in tandem with negative affect. Negative affect refers to the experience of non-specific distress or unpleasant emotionality (Rees et al., 2015: 3). This concept indicates that even when a person is described as resilient, this does not mean that no distress was experienced at any moment in the person’s resilience trajectory.

Rees et al. (2015) and others have shown that neuroticism has a strong biological foundation [i.e., genetic factor], which also serves as a reference point to explain why individuals will

differ in the extent to which they experience negative emotional states. Hence, it would be misleading to suggest that people who are likely to display resilience do not get upset, disturbed, or unhappy when faced with undesirable events/situations. As noted earlier, the critical point is that even resilient individuals may experience a transient negative stress reaction at some point. In other words, human beings are bound to and expected to experience stress if faced with potential adversities as part of the embedded nature of human life and development. From the biological perspective, it has been strongly suggested that the human genetic factor has a probabilistic, rather than deterministic effect on how a person responds to events in their environment (Academy of Medical Sciences, 2008; Reich et al., 2010).

The resilience process may not be without some internalisation of one's identity within the context of the experience of stress. As Reich et al. (2010: 71) have noted, "Resilience involves intrinsic and extrinsic processes of successful adaptation, and genetic variations contribute to individual differences in these capacities". By looking at resilience through neuroticism lenses, the nature of human predispositions, which might potentially result from the basic biological process, can be revealed. Moreover, in doing so, one can [theoretically] work through the problem, informing sound tools of measurement on how individuals recuperate despite the heritability of negative resilient characteristics. Genetic influences do not simply make us realise the probabilities that individuals may exhibit specific physical appearance due to genetic attributions (e.g., a resemblance between individuals and their consanguineous family members). They also make us realise that individuals may inherit genetic cognitive abilities which influences the level of stress reactivity individuals experience when faced with adversities (e.g., a resemblance on family members on patterns of resilience thinking, behaviour, and emotion regulation). Hence, it is suggested that neuroticism can either promote or inhibit the process of resilience.

Perhaps the biggest obstacle to managing workplace adversities is the inability of the individual to experience emotional stability. As indicated earlier, individuals experience stress differently, meaning that while some may be hot-blooded or highly emotional, others may be cool-headed or composed. A critical factor that helps explain why some people react more positively to adversities than others is the concept of emotional stability. Emotional stability, also known as the opposite of neuroticism, refers to "a personality dimension that characterises

someone as calm, self-confident, secure [positive] versus nervous, depressed, and insecure [negative], like in the case of neuroticism” (Robbins & Judge, 2013: 137). According to this view, people with positive emotional stability or the ability to withstand stress “tend to be calm, self-confident, and secure, whereas those with high negative scores tend to be nervous, anxious, depressed, and insecure” (Robbins & Judge, 2013: 136). One interpretation is that an emotionally stable person can withstand highly stressful events without experiencing serious debilitating effects. As far as resilience is concerned, this also suggests that individuals with positive levels of emotional stability can bounce back from adversities much faster than emotionally unstable individuals.

#### 4.3.1.1. Neuroticism and Health Implications

The literature review in this area reveals that a significant level of neuroticism can be dangerous to human health and well-being. It can degrade one’s self-efficacy beliefs, coping abilities, and overall health (Anagnostopoulos & Botse, 2016; Brown & Ryan, 2003; Cusack et al., 2016; Lazarus & Folkman, 1984; Rees et al., 2015). Neuroticism can have such an effect because it strongly correlates with well-known negative psychological outcomes such as stress, anxiety, worry, rumination, and depression (Cusack et al., 2016; Johnson & Lester, 2022; Lunt et al., 2007; Rees et al., 2015; Robison et al., 2016). High levels of neuroticism have been reported among working women with the prevalence of NMHOs such as burnout, depression and compassion fatigue (Anagnostopoulos & Botse, 2016; Cadete, 2017; Garcia-Rivera et al., 2022; Lunt et al., 2007). Anagnostopoulos and Botse (2016) show that neuroticism is positively and significantly associated with health anxiety. Taylor & Asmund, (2004 cited in Anagnostopoulos and Botse, 2016:01) have defined health anxiety as “an exaggerating fear and persistent worry about one’s health, along with beliefs that one has an illness or may contract a serious one in the future”. In other words, health anxiety is the tendency to be worried or preoccupied with bodily symptoms. It does not only concern clinical samples. There is also considerable evidence that health anxiety represents a prominent factor of neuroticism in non-clinical groups because of exposure to different types of environmental stressors (Berry & Cassidy, 2013; Bezuidenhout & Cilliers, 2010; Lunt et al., 2007; Reich et al., 2010; Salimzadeh, 2017). Regarding non-clinical groups, Anagnostopoulos and Botse (2016) describe health anxiety as being characterised by alienation, reassurance-seeking,

absorption, and worry, all of which are considered direct factors that characterise neuroticism, namely interpersonal, behavioural, perceptual, and affective factors.

According to Hahn et al. (2015), neuroticism plays a significant role in determining attentional performance. Neuroticism is one of the fundamental components of resilience that is critical for academics to overcome adversity and achieve positive outcomes, since it has a powerful effect in determining attentional performance. Hahn et al. (2015) concur that individuals with high levels of neuroticism are most likely to be fixated on threatening stimuli or adverse outcomes for a longer time. Further, Robison et al. (2016) show that the reason neuroticism would lead to deficient attention control abilities is that a higher level of neuroticism may lead to persistent mind-wandering. Mind-wandering refers to a shift in thoughts away from a task or the external environment to internal, self-generated thoughts (Robison et al., 2016: 649).

Regarding attention performance, results from Hahn et al. (2015) reveal that high levels of neuroticism lead to decreased ability to accurately detect changes in the environment, supposedly due to decreased attentional control and disengagement. This again indicates that highly neurotic individuals have more difficulty constructively perceiving details and changes [i.e., experiences] in the environment. In contrast, individuals can become predisposed to high levels of neuroticism, putting them at risk of high levels of self-consciousness and low levels of sociability, due to shyness (Afshan et al., 2015; Bandura, 2006; Reich et al., 2010). Shyness is defined as a psychological state that causes feelings of discomfort, leading to avoidance of social contact (Afshan et al., 2015). This suggests that in the context of women academics, high levels of inherent shyness are likely to lead to women academics becoming more disinclined to [or shying away from] facing the WEFs which they feel anxious and concerned about, and not feeling capable of drawing upon their strengths to surmount negative experiences of WEFs.

Another influential factor that has been shown to have a bearing on levels of neuroticism is that of personality trait extraversion. Extraversion refers to a personality dimension describing someone who is sociable, gregarious, and assertive (Robbins & Judge, 2013: 137), and is a vital personality trait in the academic profession context. A consistent negative relationship between extraversion and neuroticism has been reported by numerous researchers in the

literature (Afshan et al., 2015; Hahn et al., 2015; Hlatywayo et al., 2013; Røysamb et al., 2018). Røysamb et al. (2018) explain that extraversion qualities manifest when people express positive, assertive, energetic, social, talkative, and warm behaviours. These are typical traits more often observed in extravert personalities, than in introvert personalities (Afshan et al., 2015).

The study conducted by Hahn et al. (2015), reported a significant negative correlation between extraversion and neuroticism scores [ $r = -.27$ ,  $p = .01$ ]. It concluded that levels of extraversion and neuroticism can predict attentional performance during a change detection task. This means that with increased extraversion, a decline in the level of neuroticism is also anticipated. Conversely, with lower levels of neuroticism, an increase in the level of extraversion is likely (Hlatywayo et al., 2013; Røysamb et al., 2018). The study by Hlatywayo et al. (2013) in the South African banking sector reported significant gender differences between neuroticism, extraversion, and gender. The study indicated that women reported higher neuroticism than men, and that men reported higher on extraversion and openness than women.

Consistent with the theory of the social construction of gender, views of women in the workplace are reductionist and based on the idea that women's inborn nurturing qualities [such as emotional, warm, and expressive] are not related to strong leadership abilities (Katila & Eriksson, 2013), such as being rational, assertive, and self-confident, as men are typically perceived to be (Williams, 2017). This strongly suggests that as women are frequently exposed to high levels of stress due to constructed gender-role stereotypes, they might also be more prone to experiencing high levels of neuroticism. For example, in many cultural contexts, shyness is considered a necessary quality of women. According to Afshan et al. (2015), in the Indian context for example, if women lack modesty and possess more of a masculine character, they would often be perceived as being bold, brash, and non-feminine. In the South African context, Kinnear and Ortlepp (2016) concur that it is challenging for women to appear assertive, self-confident, or entrepreneurial, because they are often perceived as abrasive, arrogant, and self-promoting. As Kinnear and Ortlepp (2016) and Mayer et al. (2016) have noted, in many instances women in senior leadership positions may be liked for conforming to female stereotypes, but not respected and valued by co-workers, or by the institution at large.

A number of researchers have suggested that some women tend to face more significant challenges because they have internalised the constructed gender differences for operating in the home domain and have brought this into the workplace domain (Council on Higher Education, 2016a; Savigny, 2014; Van Veelen & Derks, 2022; Williams, 2017). The Council on Higher Education (2016a) suggest that the results of women academic's career success might be a simple reflection of the fact that women begin to internalise their potential to succeed in HEIs, and only those with strong support at home and resilient enough to resist the temptation to be subservient, can advance. However, if support outside of the work environment is not available, it may cause women to experience work-home issues. The issues of WEFs may be compounded because some women may not have the resilience to work around their obstacles, because of lack of institutional support. The Council on Higher Education (2016a) further attest that when one cannot remove obstacles, one needs to learn to work around them. Leadership capacity building, empowerment, and development would provide women with skills to see those possibilities of working around their obstacles and define suitable alternatives for advancement (Abaza, 2021; Council on Higher Education, 2016a; Cheesebrough et al., 2020). This study proposes that South African HEIs actively introduce/incorporate resilience-building strategies into existing HRM systems/practices, to raise more awareness of women's struggles within the HEIs workplace context. This would not only be a desirable system to FAs who must work hard to prove themselves, but would also encourage other women academics in different circumstances and future generations of FAs to negotiate and overcome such struggles.

#### **4.3.2. Mindfulness as Part of Resilience in Academia**

Most generally, mindfulness can be defined as, "the ability to attend to intentionally and maintain non-judgmental awareness of one's experience [thoughts, feelings, physical sensations] in the present moment" (Reich et al., 2010: 472). Mindfulness is described by Rees et al. (2015: 3) as a trait-like tendency to experience and express mindful or cognisance qualities such as non-judgment qualities, and behavioural qualities such as acting with awareness, rather than without attention (Rees et al., 2015). Mindfulness is based on the redefinition of health which has its origins in Zen Buddhist meditation practices (Kent et al., 2015) to address problems that affect the mind and body. Although mindfulness is often seen from the perspective of religion or spirituality (Robertson et al., 2015), its primary role is to

support emotion regulation (Bossi et al., 2022). Mindful awareness, focus, attention, and concentration practices, for example, are considered mindfulness-based cognitive therapy strategies that support emotion regulation (Fazia et al., 2021; Kent et al., 2015; Robertson et al., 2015). Furthermore, this resilience dimension which falls under the umbrella of the psychosocial domain is correlated to the concept of emotional intelligence [EI].

#### 4.3.2.1. Emotional Intelligence and Mindfulness

The theory and practice of mindfulness practices have been associated with increased emotional intelligence and positive cognitive capacity for reappraisal. These outcomes fall within the realm of psychological resilience and psychological adjustment and provide an opportunity to extend the discussion to include HRM roles which involve help craft mindfulness-based interventions towards stress reduction in FAs. The level of EI of individuals will impact significantly on their mental state and ability to focus their awareness on the experiences at hand. According to Robbins and Judge (2013: 112), EI describes “a person’s ability to perceive emotions in the self and others, understand the meaning of these emotions, and regulate one’s emotions accordingly”.

To put it another way, EI refers to “the ability to detect and to manage emotional cues and information” (Robbins & Judge, 2013: 113). When it comes to how EI influences people’s response to adverse life situations, two general affect states, namely emotions and moods, can be distinguished (Robbins & Judge, 2013). Emotions can be defined as “intense feelings directed at someone or something” (Robbins & Judge, 2013: 98). Some of the primary human emotions are anger, contempt, enthusiasm, envy, fear, frustration, disappointment, embarrassment, disgust, happiness, hate, hope, jealousy, joy, love, pride, surprise, and sadness. As Robbins and Judge (2013) explain, emotions are often influenced by one’s culture and life context. As such, the experience of a particular emotion may not always be the same as the way people express it in terms of facial expressions (Robbins & Judge, 2013). Consequently, the best way to interpret emotions would be by classifying them into positive affect and negative affect (Bossi et al., 2022; Robbins & Judge, 2013). That is, positive emotions and negative emotions. In this sense, emotions become mood states and can be interpreted more generally, rather than in isolation (Robbins & Judge, 2013). Robbins and Judge (2013: 98), describe moods as “less intense feelings than emotions and often [though not always] arise

without a specific event acting as a stimulus”. Thus, it can be hypothesised that without a strong sense of the ability to control emotions and moods, women academics’ worst impulses could be unleashed when faced with potential setbacks.

According to Mayer et al. (2017), academics should strive to increase overall emotional intelligence [EI]. An emotionally intelligent person, is one who can [1] perceive emotions in the self and others, [2] understand the meaning of these emotions, and [3] regulate one’s emotions accordingly (Robbins & Judge, 2013: 112). Particularly in the case of intrapersonal and interpersonal challenges in HEIs, researchers believe that EI significantly enhances a person’s intellectual abilities, resulting in the person becoming more effective in managing the complexities of such factors (Bitzer, 2009; Brown & Ryan, 2003; Council on Higher Education, 2016a; Mabaso & Dlamini, 2018; Mayer et al., 2017). Clearly, the level of EI influences the level of soft skills expected to handle daily intrapersonal, and interpersonal demands, both judiciously and empathetically.

More recently, a South African study of the post-apartheid era challenges affecting women in HEIs found that EI was positively associated with desirable leadership qualities (Mayer et al., 2017). The study explored the EI of South African academic women leaders in HEIs and found evidence to support the view that higher emotional intelligence leads to a greater likelihood of women meeting academic work-related demands and pressures. The level of a person’s EI is proved by his or her EQ (emotional quotient). Mayer et al. (2017) assessed the level of emotional intelligence of women leaders, who were participants in the study, from the perspective of five scales. The scales were: interpersonal EQ, intrapersonal EQ, stress management EQ, adaptability EQ, and general mood EQ. Fifteen [15] subscales of EQ, including self-regard, interpersonal relationships, problem-solving, empathy, emotional self-awareness, assertiveness, impulse control, and social responsibility, were described as most strongly related to the emotional intelligence of the group of academic women in the study. One of the relevant findings of this study was around impulse control [i.e., management of stress control] in academic women leaders. As Mayer et al. (2017:07) can state, “women leaders have learned across all groups how to manage to control their emotional impulses and cope with their emotions effectively”. As will be seen in the chapter, these concepts are implicit constructs in the theory of psychological resilience. These findings are relevant

because of the nature of this current study which proposes that resilience can be acquired through enhancing internal attributes, and establishing external support systems.

Emotional intelligence [EI] has been found to have the potential of improving a person's ability to explain and predict the level of emotional exhaustion in oneself and others. In practice however, without resilience on the part of individuals, individuals may often fail to address their aversive experiences in the workplace. Emotional exhaustion is described as "loss of energy, the feeling of being psychologically overloaded and the loss of individual's emotional resources" (Bilge, 2006: 1152). Being emotionally intelligent, entails having or expressing an accurate and deep understanding of someone or something. In contrast, being psychologically resilient causes a person to develop or demonstrate fitting and adaptive behaviour in response to a situation or stimulus. Importantly, a higher-than-average emotional intelligence level would lead to knowledge and a greater understanding of felt emotions and what is expected in terms of resilience to respond to an aversive situation or stimulus. In other words, a person does not need to develop a good awareness of the emotions of the self and others that can lead a person to succeed in overcoming risks [i.e., experiencing resilience].

The ability to overcome risks is proven in a person's behaviour as he or she struggles to self-regulate attention, arousal, emotion, and action during challenging situations (Du Plessis, 2020; Reich et al., 2010). The issue of human/individual behaviour is identified as a significant predictor of resilience in the literature (American Heart Association, 2017; Cadete, 2017; Pinnington et al., 2007; Rees et al., 2015; Reich et al., 2010). In an interview regarding changing risky behaviour, Professor Mark Tomlinson from Stellenbosch University in South Africa stated:

We know change in behaviour is very difficult, and we have this idea that if we think clearly/we think rationally, then people will always do the right thing. But the thing that intervenes in that scenario...is a sort of notion...called 'salience of risk'. So, all of us are always weighing up risk in everything we do [for example]; we walk across the road, we look left, we look right or we don't, or we think that somethings are more dangerous than others. So, all of us are always weighing up these things even if not consciously (Tomlinson, 2020: eNCA Interview, 22 August).

The salience theory of choice under risk is well known in the field of psychology concerning rational behaviour and has direct relevance for this study. This theory, proposed by Bordalo et al. (2012: 36), assumes that “decision makers overweight the upside of a risky choice when it is salient and thus behave in a risk-seeking way, and overweight the downside when it is salient, and behave in a risk averse way”. By salient risks, the theory suggests events that are particularly noticeable or come to mind more quickly after being experienced (Bordalo et al., 2012). The salient risks or events in the current study are the HEIs’ WEFs [as discussed in chapter two] that FAs might regard as more important factors in their work environment. Therefore, the reaction of FAs to WEFs can be viewed from the salience theory of choice under risk perspective. If a salient WEF is aversive, the chances are high that FAs might focus on the negative side of the event. However, suppose a salient WEF is not aversive. In that case, the chances are high that FAs might focus on the positive side of the event. In practice, an aversive WEF event might receive more attention from academics because the WEF is a real concern for them. Suppose academics refrain from overreacting to potential WEFs? In that case, they may feel less adversely affected by the issue because their risk perception is relatively unchallenged or low.

The critical aspect of mindfulness is that of conscious awareness, which may require the investment of a good amount of quality time to master. Experiencing lower mindfulness is not surprising given that the concept of mindfulness is often associated with religion or spirituality, that many still neglect the role of mindfulness in stressful times. With the increase in multitasking of work-life activities, FAs may have to pay increased attention to multiple numbers of activities. In demanding situations, individuals with positive psychological balance are more likely to cope with the associated pressures of the work-life activities (Woods-Giscombe & Black, 2010). As the literature suggests, if normative stress turns into chronic stress, then a person’s health and level of alertness can be impaired to the point of increasing fatigue and reducing the resilience of the brain (Lazarus & Folkman, 1984; Rees et al., 2015; Shrivastava & Desousa, 2016). As a result of impaired attention, FAs’ ability to meet the demands of the job is diminished.

The concept of objective awareness has been increasingly emphasised in the literature, particularly among resilience investigators and philosophers of mindfulness and resilience (Ali

& Johns, 2018; Mayer & Surtee, 2015). Accordingly, individuals must invest more conscious and effortful strategies to decouple internal sources of distress and eustress at work. For example:

By fostering objective awareness of feelings, thoughts, behaviours, and choices, mindfulness increases awareness of the whole range of choices available to individuals at any given moment” (Robbins & Judge, 2013: 438).

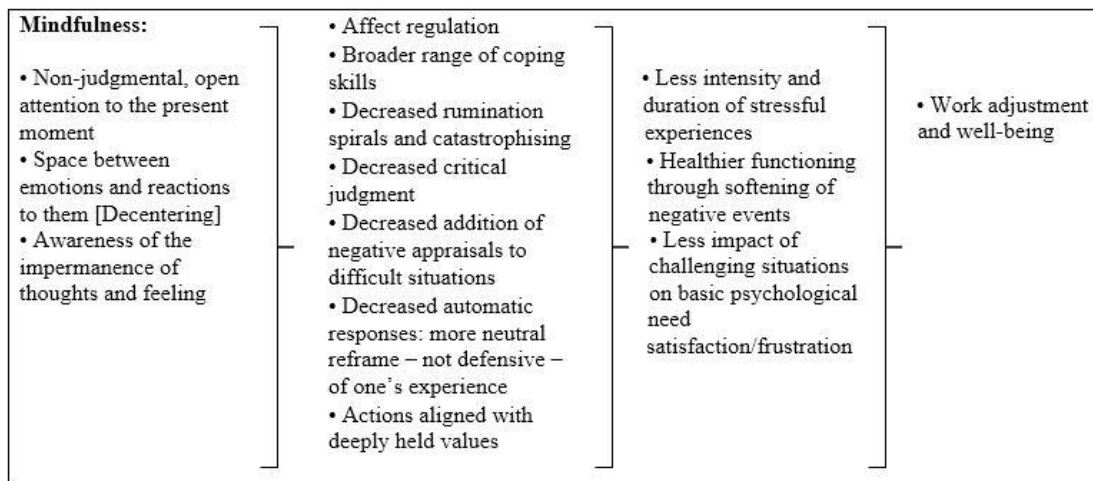
Indeed, if feelings, thoughts, and emotions are cultivated, resilience behaviours and actions are also stimulated. Conversely, if feelings, thoughts, and emotions are passive, then resilience behaviours and actions are also discouraged, whereby individuals passively react to events and experience a passive mental recovery if faced with stressful events.

The research of Thompson et al. (2011) on mindfulness and individual resilience to trauma suggests that there is a higher probability that people who score high on awareness would respond to stressful life events with salient resilience. Lower levels of mindfulness are generally linked to lower emotion-regulation control and lower states of cognitive functioning, or negative reappraisals of stressful situations (Bossi et al., 2022; Marshall & Morris, 2011). Thus, people who score low on mindfulness can be found to experience helplessness, as well as emotionally engaging, time-consuming, unproductive activities, and self-destructive behaviour (Woods-Giscombe & Black, 2010). As indicated by Marshall and Morris (2011), with ever-increasing academic workloads and the need to manage multiple roles and identities, it has become critical to strengthen mindfulness. Without positive mindfulness, it is highly likely that the ability to notice habitual tendencies in the face of adversities is decreased, and lead people to vacillate about sharing their concerns with others, or get professional help. Thus, learned mindfulness is key for people’s responses to controllable events after exposure to uncontrollable events. During such self-awareness processes, people learn more effective defence mechanisms to protect them against NMHOs. Affiliation, altruism, anticipation, humour, self-assertion, self-observation, and sublimation are examples of central defence mechanisms underlying the effects of higher mindfulness on potential neuroticism issues. In addition, people can develop skills to control internal states, such as anger, frustration, hostility, and irritation, which in turn enhances their ability to influence how they react to external events (Casad et al., 2021).

#### 4.3.2.2. Mindfulness in Non-Academic Working Populations

Schultz et al. (2014) investigated the role of mindfulness in promoting the well-being and work adjustment of 280 male and female United States residents, who worked in a company. In the study, the researchers found that mindfulness was a protective factor to employees in non-supportive workplace environments. According to Schultz et al. (2014), mindfulness levels significantly affected work adjustment with reduced work frustration effects on employees. Figure 4.3 depicts the overall protective effects of mindfulness, as evidenced in their study (Schultz et al., 2014).

The study shows that employees with higher scores of mindfulness shared similar levels of dissatisfaction regarding the low levels of managerial autonomy support [or interpersonal encouragement from their managers]. However, this study also concurs that those employees with higher levels of mindfulness display a more resilient response to potential WEFs, such as unfavourable managerial support for autonomy. Schultz et al. (2014: 10) explain that being high in mindfulness “does not eliminate the negative consequences of a non-supportive work environment”. Instead, people with high levels of mindfulness are more likely to experience “challenges as less overwhelming, and they also show more active coping to avert negative consequences” (Schultz et al., 2014: 10).



**Figure 4.3. Theoretical Account of How Mindfulness May Influence Psychological Need Satisfaction/Frustration in the Workplace, and in turn on Work Well-Being**

Source: Schultz et al. (2014:05)

As suggested by Schultz et al. (2014:05), the protective effects of mindfulness demonstrated in Figure 4.3, are also of paramount importance as they communicate to employees in the HEI workplace environments. Recently, Poalses and Bezuidenhout (2018) undertook a comparative mixed-method study on the mental health of administrative and academic staff from the Open Distance Learning University in South Africa. The study determined that the academic staff were particularly vulnerable to occupational stress and risk, due to job overload. In their study, Poalses and Bezuidenhout (2018: 180) also revealed that occupational stress factors could have significant adverse effects on mental health. For example, feelings of job insecurity, poor remuneration, high workload, time pressure, not having role clarity on what is expected from them, and not knowing whom to ask for help when needed. Poalses and Bezuidenhout (2018) emphasise that academic job demands might include quantitative job demands [e.g., workload, time pressures, due dates], and qualitative job demands [e.g., very complex, highly cognitive, ambiguous]. Failure to address such demands might result in academic staff experiencing exhaustion or disengagement with their job, making it unlikely for them to attend to commitments with the expected attention and outcomes.

A study concerning leadership development and career advancement of women working in higher education undertaken by Mayer and Surtee (2015) further illustrates the importance of mindfulness. The application of mindfulness was reported as a seminal aspect of women leaders in HEIs in South Africa. For example, one participant in their study reported:

Leadership is having a concept of spirituality which is based on values. You watch what you do...as a leader, you have to serve. Being mindful. Mindfulness is caring for people, caring for the environment, having empathy in your heart towards other things, and looking after things as well to serve the people (Mayer & Surtee, 2015: 619).

The example thus suggests that the more institutional support FAs can receive through the institution's HRM regarding maintaining optimal mind-body health, the more effective they will be at managing stressful WEFs.

#### 4.3.2.3. Positive Affect and Mindfulness as Predictors of Resilience

A research study by Pillay (2020) enquired into the positive affect and mindfulness on predicting resilience amongst 255 women leaders in four South African higher education institutions. The author used the mindfulness attention awareness scale [MAAS] by Brown and Ryan (2003) to examine mindfulness, and the positive and negative affectivity schedule [PANAS] by Watson et al. (1988) to examine positive affect. Pillay (2020) posits that resilience can be enhanced by investing in women academic leaders' psychological resources such as mindfulness and positive affect. The study reported a high score of positive affect [M=4.05; SD=5.22] and moderately high score of mindfulness [M=4.27; SD=0.80], resulting in an overall high level score of resilience [M=5.97; SD=0.65] (Pillay, 2020). Pillay (2020) thus argued that the women academic participants might have scored high in resilient because of their already established leadership positions, requiring a great deal of personal resilience. Consequently, Pillay (2020) recommended that HEIs should develop coaching and mentoring opportunities to promote positive affect, as well as create mindfulness opportunities to encourage the practice of mindfulness at work [e.g., meditation exercises], as part of their strategy to build resilience among women leaders (Bossi et al., 2022; Fazia et al., 2021; Pillay, 2020).

#### 4.3.3. Self-Efficacy as Part of Resilience in Academia

The quality of academic WEFs depends on the self-efficacy of academic employees. Academics have a great influence upon the overall institutional objectives of the university (Fry et al., 2009; Marini et al., 2019; Marshall & Morris, 2011; Sin & Amaral, 2016; Walt et al., 2011). As such, women academics should strive to sustain high perceived self-efficacy to function well in the work environment.

Albert Bandura is perhaps the most acclaimed social cognitive psychologist in the field of self-efficacy, whose writings continue to be debated among researchers to this day. In 1963, Bandura published what many consider a seminal work in the field of psychology, known as the social learning theory [SLT] (Bandura, 1977, 1994). According to this theory, people can learn behaviours by observing other individuals, and choosing to, or not to imitate the behaviour observed. After establishing that human behaviour development from social

experiences has a strong cognitive basis, Bandura modified his social learning theory and in 1986 renamed it social cognitive theory [SCT] (Bandura, 1977, 1994). While it is true that observing, or imitating someone's behaviour can potentially influence one's behaviour, only by engaging in thoughts and feelings can behaviour be effectively instilled. The social cognitive theory is founded on the notion that unless cognitive [mental] processes are activated, learning or actions cannot occur. Bandura theorised that human behaviour is primarily mediated through four cognitive processes: attention, retention, reproduction, and motivation. He argued that it is the interaction between these processes that determines how positive or negative people respond to external stimuli. Probably the most critical aspect of his social cognitive theory is the concept of self-efficacy (Bandura, 1977, 1994).

Self-efficacy is a fundamental by-product of the self-concept ideology, which refers to a process of internalisation of how the person sees the 'self' (Reich et al., 2010). Bandura (1994: 1) defines perceived self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives". From a self-concept perspective, the word 'self' in self-efficacy means personal efficacy, meaning oneself, and not a group of individuals [also known as group-efficacy] (Bandura, 1977, 1994, 1997, 2006). The exploration of group-efficacy is outside of this study. However, asserting the difference between individual and collective efficacy aids emphasising the focus of this study.

A useful concept for studying self-efficacy in working populations and its role to influencing psychological resilience is that of an agentic theory of human behaviour which Bandura has written extensively on. An agentic perspective of human development, adaptation and change has been adopted in Bandura's SCT theory, to describe a person as an agent (Bandura, 2006). An agent, according to Bandura (Bandura, 2006), can influence their functioning and their life circumstances even if they lack specific attributes. In other words, individuals successfully develop certain behaviours if there is intentionality, forethought, self-reactiveness, and self-effectiveness (Bandura, 2006). These four concepts are core properties in Bandura's theory of human agency and are related to a resilient sense of self-efficacy.

#### 4.3.3.1. Self-Efficacy in the Context of Women Academics in African HEIs

There is ample evidence indicating that women academics with high self-efficacy are more efficient in recovering from challenges or adversity from the university workplace. Researchers agree that working as an academic generally requires upholding positive levels of self-efficacy to perform a specific work behaviour and resolve work-related issues successfully (Boateng, 2018; Flaxman et al., 2012; Hodgson, 2017; Poalses & Bezuidenhout, 2018; Salehi et al., 2014). Within the academic workplace context, an academic professional is entitled to thrive towards fulfilling his or her career interests. However, whether they fulfil their career interests and the level and form of their career aspirations within the university, largely depends on their perceived self-efficacy exercised through the constraints of work-related factors.

The issues of conformity to patriarchal norms and practices within African university workplaces in many ways remains at the centre of most forms of adverse-WEFs confronting FAs (Boateng, 2018; Council on Higher Education, 2016b; Idahosa, 2019; Maphalala & Mpofo, 2017; Moodly, 2015). As a result, women academics in African HEIs remain adversely affected by ongoing representation, equity, and equality problems (Idahosa, 2019; Nkomo & Ngambi, 2009). As the male-dominated university culture is generally seen as the fundamental stumbling block to women in African HEIs (Boateng, 2018; Callaghan, 2015), WEFs are likely to continue to adversely affect women's work lives or careers, and their general psychological well-being. Confronted with perceived adverse WEFs, FAs may demonstrate higher cognitive processes and act as fore-thinkers and self-regulators of their own behaviour if they have a high sense of efficacy (Bandura, 2006). Conversely, FAs who express lower perceived self-efficacy might experience more difficulties thriving in the work environment, and might ultimately be more likely to experience negative psychological outcomes more frequently (Gabryelska, 2021). The study by Rees et al. (2015) shows that where a significant negative relationship between work-related stress and general psychological functioning exists, the quality of the work-life of employees can suffer as a result. This implies that if a female academic's internal capacities or mental strength is nurtured, she might be more likely to manage work-related issues. In essence, by actively perceiving themselves as capable of managing situations of adversity, women can sustain their work-life quality.

Boateng (2018), advocates that to help address the challenges that might contribute to avoidable adverse outcomes for women in academia, HEIs must use a strengths-based approach to stimulate the development of self-efficacy and resilience of women academics. This approach focuses on building and strengthening, “a wide range of gifts, capacities, skills, resources, and aspirations” (Boateng, 2018: 23). Boateng (2018: 24) studied the experiences of ten FAs who occupied senior positions in three public universities in Ghana [i.e., director of an academic or research unit, dean, registrar, or lecturer]. The study was conducted in the form of in-depth, open-ended interviews to capture FAs negotiations and strengths to overcome their work challenges and succeed in their careers (Boateng, 2018). The study reported that Ghanaian women had to learn ingenious ways to overcome university challenges such as gender stereotypes, sexual harassment, work-life balance constraints, and the general lack of support systems (Boateng, 2018). To operate effectively in the work environment and not succumb to psychological distress from these challenges, women must actively draw on their inner strengths and resources to surmount such negative work-life experiences (Boateng, 2018). This again indicates that from a resilient perspective, there are many reasons why FAs should reflect positive self-efficacy.

Self-efficacy also plays a significant role in the quantity and quality of academic work produced through participation in decision making (Naseem & Khalid, 2012). For example, when undertaking work duties, academics, in general, are required to express self-efficacy as a job requirement. According to Clarke et al. (2015), a lot of the decisions of the teaching and research roles undertaken by some academics, are made by the head of departments of the university. In some cases, academics might have the discretion to design and implement what they consider the best pedagogical approaches and research methodologies to employ in their teaching and research roles (Segarra & Gentry, 2021). Previously, in chapter two, it has been noted that having a certain degree of autonomy within one’s academic functions is essential for FAs to create opportunities for meaningful work experiences and self-development. The emphasis from a self-efficacy and resilience perspective is on having a positive sense of an internal authority, which influences work-life experiences. Without this sense of internal authority, managing work functions, engaging various stakeholders at work, and handling various work-life situations can lead to negative experiences.

A study on the academic staff of a large South African HEI, has identified three major role conflicts that act as barriers to academic career progression. Specifically, the tension between teaching and research, research self-efficacy, and family responsibilities emerged as career crisis milestones or risk factors in the relationship between job satisfaction [i.e., satisfaction with teaching, administration, and research] and academic career progression (Callaghan, 2015). The study revealed that a significant relationship exists between career crisis milestones and academic designations [i.e., Mr/Ms designation, doctoral designation, and professorial designation]. Under the “tension between teaching and research” findings’ theme, the study revealed that the level of satisfaction with research output was lower overall, than the level of satisfaction with teaching, across the entire sample. Regarding the ‘self-efficacy’ crisis milestone, the findings indicated that individuals in the Mr/Ms cohort were significantly more satisfied with teaching than the doctoral cohort individuals. The assumption is that having significantly higher levels of research output should increase the probability of progression to doctoral and professorial academic career designations. Not unexpectedly, research self-efficacy was found to be negatively associated with the Mr/Ms cohort, while positively associated with the doctoral cohort (Callaghan, 2015), indicating that self-efficacy beliefs related to research activities influence career path and progression among academic staff (Bandura, 2006). The study found that both male and female academics in the doctoral cohort had significantly fewer dependent children. As Callaghan (2015) has argued, time constraints to achieve a balance between teaching, administration and research roles and family responsibilities, and having dependent children may have led to a diminished research output capacity required for career progression.

The link between a professorial designation or professorial promotions and job satisfaction is a relevant one in HEIs since it reflects endowments of career self-efficacy. Callaghan (2015: 10) reports that job satisfaction, particularly satisfaction with teaching and with administration obligations, were “associated significantly with either or both of the other two tested cohorts”, but added that “none of these were significant for the professorial cohort”. They concur that research roles play a significant role in determining job satisfaction at the professorial level (Callaghan, 2015). Academic work knowledge, skills and abilities are critical benchmarks of successful career progression to a professorial position. The acquisition of these outcomes in academia is usually achieved through extensive career experience that promotes continuous

capacity [i.e., self-efficacy] to integrate or balance the roles of teaching and research (Bandura, 2006; Callaghan, 2015; França, 2012; Fry et al., 2009; Hodgson, 2017; Schulze, 2015).

#### 4.3.3.2. Constructs Relevant to Promote Self-Efficacy

In the view of the self-concept theory, several ‘self’ constructs seem to play an essential role in increasing self-efficacy in human beings. Three of the popular constructs, namely self-confidence, self-esteem, and self-understanding, are sometimes used synonymously with the construct of self-efficacy or confused as synonyms of self-efficacy (Bandura, 1994; Marshall & Morris, 2011; Reich et al., 2010). It is relevant to distinguish between these concepts because they are an interacting part of the self-efficacy process that helps individuals develop resilience. Self-efficacy is about self-belief in one’s competences to manage specific tasks.

An illustration of the difference between self-efficacy and confidence is provided by Bandura (1997) as follows:

Confidence is a nondescript term that refers to strength of belief but does not necessarily specify what the certainty is about... Perceived self-efficacy refers to belief in one’s agentic capabilities, that one can produce given levels of attainment (Bandura, 1997: 382).

Two of the WEFs discussed previously of high relevance to the subject of self-confidence is that of knowledge, skills, and ability [or KSA], and coaching and mentoring support. The more confident academics are about their work KSAs, the more likely they will envision and achieve positive outcomes if faced with potential work-related challenges. Coaching and mentoring support in the context of this study is conceptualised as the process whereby an experienced leader provides KSAs guidance to a less-experienced employee to improve the individual performance and personal satisfaction of the less-experienced employee and, consequently, enhance organisational effectiveness (Merga & Mason, 2021; Newsome et al., 2021; Rowley & Jackson, 2011; Talbert et al., 2021). The fact that academics are assigned specific work roles does not mean that they can complete the tasks successfully. Academics differ in their level of perceived self-efficacy. In some cases, it is part of the academic’s university head of department and the university’s HRM to support and direct how academics should carry out certain academic functions. This process can also help academics manage and overcome

potential stumbling blocks in the workplace. For example, a lack of mentoring or coaching support in work functions can be a workplace reality for many academics (Love et al., 2022; Merga & Mason, 2021). In such a case, an increased lack of confidence resulting from such an experience can have a considerable knock-on effect on the workplace experiences of academics.

Self-esteem also differs from self-efficacy, in that self-esteem refers to how the person likes himself or herself (Reich et al., 2010). Factors such as career advancement, research publications, academic qualifications and skills, work recognition, financial rewards become critical factors in promoting self-esteem, as they affect how academics feel about themselves. For example, Ferman (2011), observes that university teaching presents a challenge to academics because it requires strong pedagogical knowledge and the continuous application of authentic/real-world tasks to theoretical learning. The lack of satisfying rewards for teaching work compared to research work is found to be linked to increased anxiety among academics (Dohaney et al., 2020; King & Bunce, 2020; Yang et al., 2021; Zhang, 2021). Both self-confidence and self-esteem are significantly different from self-efficacy. However, the above explanation shows that without having positive self-confidence and self-esteem, one's perceived self-efficacy can be diminished, resulting in one's failure to complete specific tasks.

Individuals who reflect a positive sense of self-confidence and self-esteem are very likely to have high perceived self-efficacy. With this perspective in mind, a sense of perceived self-efficacy can be produced through enhanced self-confidence and self-esteem, enhancing the belief that academics can indeed exercise control over their life. Therefore, in attempting to promote the resilience of FAs through enhanced self-efficacy, FAs must recognise that their level of self-confidence and self-esteem directly affects their perceived self-efficacy. Of utmost importance is how perceived self-efficacy affects coping outcomes.

#### **4.4. COPING AS PART OF RESILIENCE IN ACADEMIA**

In the previous section, it has been highlighted that FAs can influence how they think, behave, and feel about work-life experiences [described as cognitive efforts] (Bandura, 2006). However, cognitive efforts alone do not entirely determine how people successfully deal with and respond to adverse situations. In other words, no matter how people regard themselves as

resilient, resilience outcomes depend on the extent to which people can act towards counteracting negative outcomes from lived adverse events. The term ‘coping’ has numerous meanings. However, in everyday life, it is used to describe a process of adjustment following an adverse or stressful life event (Rees et al., 2015).

In the context of a HEIs, Du Plessis (2020) states that coping success is predicted by adaptive coping as opposed to maladaptive coping. Du Plessis (2020) thus asserts that adaptive coping strategies lead to a more effective response to occupational stressors. Her study was conducted in a South African HEI and revealed that academics employ both adaptive and maladaptive coping strategies to respond to occupational stressors. The study reported critical adaptive coping approaches that academics adopted to alter their perceptions of the stressor, and modulate their felt emotions. Cognitive coping, social support coping, and vacation time have been described as adaptive coping strategies.

In contrast, avoidant coping, social disengagement, and rumination with coping were described as maladaptive coping strategies. The study, which comprised of a sample of 305 academics, found that a positive relationship was observed between coping success and cognitive coping [24.9%], social support coping [17.2%] and vacation time [10.0%]; and a negative/inverse relationship was observed between coping success and avoidant coping [14.6%], social disengagement [14.0%] and rumination [11.5%]. These results indicate that coping success possibly promoted the physiological and psychological health and well-being in the sample of academics with rising levels of occupational stress (Du Plessis, 2020). The study findings further suggest that maladaptive coping strategies adopted by academics were some of the main contributors to poor coping, which promoted poor health and well-being (Du Plessis, 2020).

It has been suggested that academic work can be related to adverse psychological outcomes, for example, stress, burnout, and depression (Garcia-Rivera et al., 2022; Haggerty, 2015; Marini et al., 2019; Tight, 2010), which can be mediated by resilient coping efforts (Lian & Tam, 2014; Smith et al., 2016). The word ‘coping’ in the context of personal resilience means doing things to avoid being harmed by life-strains (Pearlin, 1978). In his seminal work, which analysed the process of coping, Pearlin (1978) concluded that individuals’ coping mechanisms are less effective when people must deal with problems within the occupational, professional

domain, than when they must deal with the problem within the personal domain. Pearlin (1978) explains that many problems from the occupational domain, stem from arrangements deeply rooted in social and economic organisations. For this reason, the ability to cope with occupational demands does not necessarily reflect the shortcomings of the individuals, but the shortcomings of the social systems with which the individuals are involved. Based on these considerations, Pearlin (1978) defined coping as “behaviour that protects people from being psychologically harmed by problematic social experiences, a behaviour that importantly mediates the impact that societies have on their members” (Pearlin, 1978: 2).

Another critical part of coping behaviour involves the strength of people’s conviction about their perceived self-efficacy in coping with ostensibly life’s adversities. Additional emphasis on the role of coping can be traced in the theory of coping. For example, Folkman et al. (1986: 572) conceptualised coping as the “person’s cognitive and behavioural efforts to manage [reduce, minimise, master, or tolerate] the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person’s resources”. It is common practice for resilience research to evaluate coping and self-efficacy theories comparably, as both constructs have been found to relate closely to psychological and social factors. In this context, research on self-efficacy and coping support the tenet that positive self-efficacy increases coping abilities and *vice-versa*; and negative self-efficacy increases coping abilities and *vice-versa* (Bandura, 1977, 1994, 1997, 2006; Crane & Searle, 2016; Fida et al., 2018; Freischlag & Silva, 2016; Rees et al., 2015; Smith et al., 2016).

At the heart of the theory of coping is the fundamental assumption and idea that part of our human development involves experiencing difficult/adverse situations. However, at the level of the individual, resilience researchers recognise that although adversity or risk is generally a resilience factor, it can also be a hindrance to a better quality of life as far as both physical and mental outcomes are concerned. It is generally clear that certain life events lead to increased NMHOs symptomatology than others [e.g., increased burnout, stress, anxiety, and depression] (Lunt et al., 2007; Reich et al., 2010; World Health Organisation & Calouste Gulbenkian Foundation, 2014). From a personal stressor and resilience bereavement perspective, for example, research suggests that people who experience bereavement due to loss of a close loved one, are more likely to experience a slower resilience trajectory and more coping

difficulties, if the loss was sudden and violent (American Addiction Centre, 2019; Elkonin & Vyver, 2011; Luthar et al., 2015; Reich et al., 2010; Southwick et al., 2014; Stone, 2019). The bereavement [loss] perspective has contributed immensely to the theory of resilience, and the growing understanding and investigation of the potential human ability to survive events which people may have little or no control over (Garmezy & Streitman, 1974; Möller, 2008; Reich et al., 2010; Stamm, 2010; Stone, 2019; Van Breda, 2001)

As noted earlier, the model of individual resilience used in this study proposes that a high level of mindfulness and self-efficacy, and a low level of neuroticism are insufficient for predicting resilience behaviour. Only when one is exposed to a risk factor that is perceived as a significant source of stress, can one's coping capacity be incited, and one's resilience capacity be revealed. Moreover, as summarised by Roncaglia (2014: 141), [and discussed earlier], the sources of stress can be different and perceived differently by people. This emphasis on sources of stress and differences in people's resilience capacity has made substantial advances to the theory of resilience, which in turn has made it possible to study the impact of resilience coping beyond loss due to bereavement. Besides bereavement, WEFs also became an area of increasing importance for resilience researchers, as WEFs also provides a contextual resilience foundation among academics. With this perspective in mind, loss in the context of university WEFs can also be viewed and treated as triggers for NMHOs. Table 4.2 shows some examples of loss within the context of academic workplaces which concern FAs (Bezuidenhout & Cilliers, 2010; Boateng, 2018; Hodgson, 2017; Idahosa, 2019; Krivokapic-Skoko & O'Neill, 2008; Lesenyeho et al., 2018; Paewai et al., 2007; Savigny, 2014). In the face of work-related loss, FAs with lower coping capacities have the increased likelihood of negative coping and adjustment.

**Table 4.2. Examples of Work-Related Loss in HEIS**

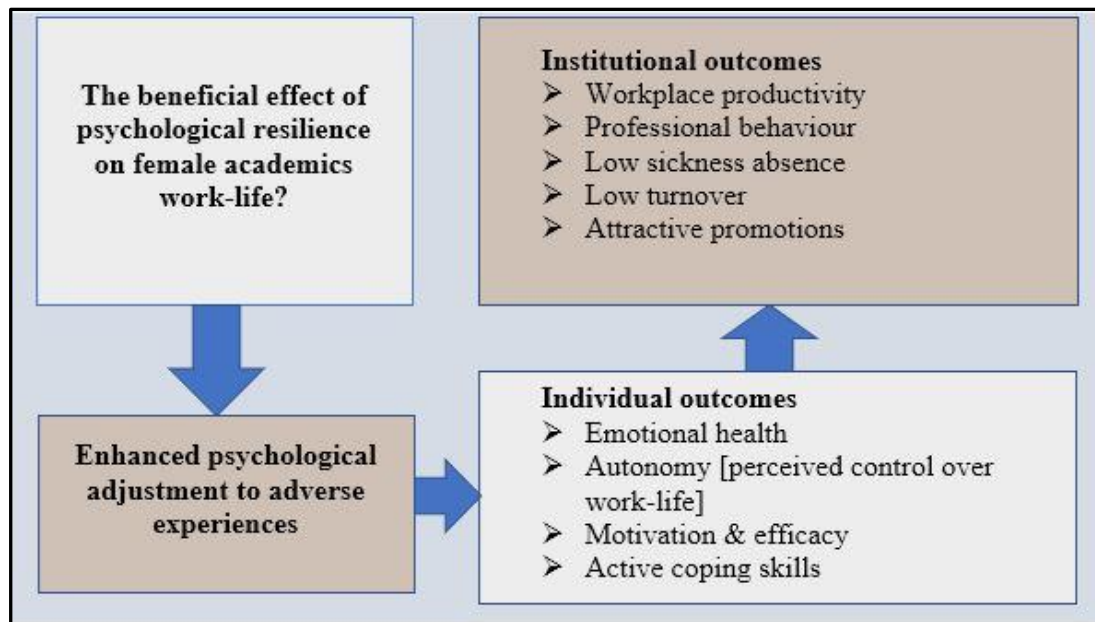
<ul style="list-style-type: none"><li>• Loss of previously acquired skills due to demotivating work settings</li><li>• Loss of motivation and confidence</li><li>• Loss of control or low autonomy or privacy</li><li>• Loss of sleep due to sustained mental work and fatigue</li><li>• Loss in research productivity because of stress</li><li>• Loss of concentration to carry out daily tasks</li><li>• Loss of career promotion due to motherhood</li><li>• Loss of commitment and trust towards the university</li><li>• Loss of social and professional networks</li><li>• Loss of mentoring and coaching support</li><li>• Loss of job or status, or position</li><li>• Loss of work friends, colleagues</li><li>• Loss of income or financial incentives</li></ul>
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Researchers also point out that in many instances, adversities or risks serve to reinforce people sense of self-efficacy, thereby exposing people’s repertoire of coping mechanisms (Fida et al., 2018; Lunt et al., 2007; Smith et al., 2016). Suppose adversity or risk is a factor that contributes to resilience outcomes. In that case, it is vital to have a pragmatic coping style that predicts superior adaptation, or adjustment to adversity (Reich et al., 2010). A critical objective of this study has been to identify mechanisms of coping to deal with academic work-related adversities. There are many coping approaches proposed in the literature; however, problem-focused coping and emotion-focused are well-known approaches put forward by Folkman et al. (1986).

People using problem-focused coping strategies aim at resolving a threatening problem or diminishing its impact by taking direct action (Reich et al., 2010). For example, confrontive coping, seeking social support, and planful problem solving (Folkman et al., 1986). Conversely, people applying emotion-focused coping strategies, focus on reducing the negative emotions aroused in response to a threat by changing the way the threat is attended to or interpreted (Bossi et al., 2022; Fazia et al., 2021; Reich et al., 2010). For example, avoidance, minimisation, selective attention, and positive comparison (Lian & Tam, 2014). Importantly, these coping strategies are only effective when individuals succeed in dealing with the problem that is causing distress [i.e., problem-focused coping] and succeed in regulating their emotions [i.e., emotion-focused coping]. The prevalence of the issue and source of the stress resulting in people having recurrences of negative experiences signals the inability to

adapt to a particular coping strategy (Roncaglia, 2014). It is also true that people can sometimes anticipate certain events, and by applying proactive coping strategies can thrive without having to experience the adverse effects of such events. However, not all events can be anticipated with the highest certainty. Thus, the key to effective coping in many instances is not only targeting the source of the problem, or adjusting how one feels about the problem, but also re-appraising the situation in a more positive mental frame. This process is made possible by applying a different coping style referred to as the appraisal-focus coping (Roncaglia, 2014).

Appraisal-focus coping is a process through which the individual evaluates his or her assumptions and perceptions of the stressor at hand through cognitive reappraisal (Bossi et al., 2022). The inability to adopt a coping style, or to experience positive coping, appears to confirm the role of cognitive behaviour therapy [CBT] to promote resilience in difficult work-related situations (Flaxman et al., 2012). Without adopting appraisal-focus coping, people may find themselves without more effective options or alternatives to manage stressful events if they were unable to adopt problem-focus coping or emotion-focus coping. More importantly, adopting appraisal-focus can promote active coping behaviours and be a strong buffer of NMHOs, thus predicting disengagement coping behaviours [i.e., acceptance, denial, and avoidance behaviours]. Figure 4.4 is a brief representation of how PR could impact both FAs and their HEIs.



**Figure 4.4. Potential Benefits of PR for Female Academics and HEIs**

Figure 4.4 indicates that resilience resources can significantly increase psychological adjustment of FAs, which subsequently can protect FAs from the adverse effects of WEFs within the institution. In terms of this study, this essentially means that HEIs have a vital role to play by providing psychosocial support to their FAs’, which in turn could result in desired tangible and intangible benefits to both FAs and their HEIs.

#### **4.5. CHAPTER SUMMARY**

This chapter has presented the model of individual workforce resilience suggested by Rees et al. (2015) which has been employed in this study to explore the experiences of resilience of FAs against the adverse effects of WEFs in HEIs. The biopsychosocial perspective of resilience has been addressed in the chapter, providing insights into the ways in which the biopsychosocial perspective of resilience explains how resilience develops. The chapter details how each of the biopsychosocial factors interact, namely the biological, psychological, and social, to produce resilience outcomes. Specifically, the chapter demonstrated how resilience factors, namely neuroticism, mindfulness, self-efficacy, and coping resulted from the dynamic interaction between the organism and the environment. Overall, the biopsychosocial resilience model was used to help describe the potential origins of NMHOs experienced within the

context of FAs, and how each factor may influence FAs' levels of resilience after experiencing an adverse WEF or multiple adverse WEFs.

As the general review of literature shows, these dimensions or concepts of resilience can largely be applied to individuals across various occupational settings. Therefore, this chapter has argued that these resilience resources may determine how FAs will ultimately respond to adverse WEFs in their HEIs. While it has been widely recognised that some genetic or personality predispositions of the individual can shape negative perceptions of life events, resilience support efforts have been viewed as an active practice by which negative predispositions can be both challenged and changed. On this basis, this chapter has revealed that HEIs play a larger role in investing resilience platforms, where the resilience of FAs can be promoted, enhanced, or sustained.

The next chapter presents a detailed discussion of the research methodology adopted to conduct this research.

## **CHAPTER FIVE**

### **RESEARCH METHODOLOGY AND METHODS**

#### **5.1. INTRODUCTION**

The previous chapter explored the theory of psychological resilience [PR]. It presented how core biopsychosocial factors of resilience in the model of individual workforce resilience might influence how female academics [FAs] respond to potential adverse workplace environmental factors [WEFs]. The various concepts illustrated in Figure 2.1 [chapter two] and Figure 4.2 [chapter four] assisted to inform the main aim of this study which was to investigate WEFs affecting FAs' PR. Given the lack of previous research regarding WEFs affecting FAs' PR, particularly in South Africa, a mixed methods research approach was implemented in this study to achieve seven main research objectives. For ease of reference, these are divided into quantitative research objectives [phase-one] and qualitative research objectives [phase-two] as listed below.

##### **5.1.1. Five Quantitative Research Objectives [Phase-One]**

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.
- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

### **5.1.2. Two Qualitative Research Objectives [Phase-Two]**

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

This chapter presents the theoretical framework and methodological assumptions that guided the selection of the research methods and strategies used to collect, analyse, and interpret the data in this study. It begins with the arguments favouring the undertaking of scientific research. It then outlines the theoretical basis for this study as far as the research paradigm chosen is concerned. The chapter then discusses the distinctive quantitative and qualitative research approaches underpinning the mixed methods research approach. After the distinction between these two research approaches is addressed, the mixed method approach and the reasoning behind adopting this approach in this study are then addressed. Following this is a section on the study population which explains and justifies the study's sample size. Next, a review of phase-one and phase-two of the study follows, providing the context of the research methods and instruments used to collect and analyse data in each of the study phases. Phase-one section of the study also outlines the pilot study's role to test the reliability of the data collection instrument. Before the final part of the chapter, a section is devoted to explaining how integration between the quantitative and qualitative approaches was realised. The chapter's final section outlines the relevant ethical considerations taken to address ethical issues in this study.

## **5.2. RESEARCH METHODOLOGY AND METHODS**

Researchers are increasingly expected to utilise evidence-based methods to assess the research questions and describe the phenomenon or topic of interest. By broad definition, a phenomenon is "something that stands in need of explanation; something of which we are aware but something that, as yet, remains known to us only in terms of how it appears to us

directly through our senses” (Denscombe, 2010: 94). Based on the literature review, it has become evident that the experiences of resilience of academic women in the South African HEIs are poorly understood. As indicated earlier, the purpose of this study has been to explore workplace environmental factors affecting FAs’ PR. Therefore, evidence-based research was necessary to better understand the impact of WEFs on academic women’s resilience.

The term ‘research’ can be defined in numerous ways, and is often defined based on the existing research types. Creswell (2002: 8 cited in Wagner et al. 2012: 3) states the following:

Research as a cyclical process of steps that typically begins with identifying a research problem or issue of study. It then involves reviewing the literature, specifying a purpose for the study, collecting, and analysing data, and forming an interpretation of the information. This process culminates in a report, disseminated to audiences, that is evaluated and used in the educational community.

This definition resonates with the different research types identified in the literature as it considers the key characteristics of social research. Research methodology, therefore, can be described as the individual steps and procedures employed from the onset of the research process.

### **5.3. RESEARCH PARADIGM: PRAGMATISM**

Conducting research requires adopting a research philosophy as a lens to recognise which research method will work best to address a particular research problem. The philosophical assumptions of the researcher are of paramount importance to solve specific research problems. Philosophical assumptions are also known as paradigms and refer to the fundamental beliefs that guide the actions and define the researcher’s worldview (Kaushik & Walsh, 2019). The researcher’s worldview is simply how a researcher thinks about and makes sense of the real world’s complexities (Kaushik & Walsh, 2019). Kaushik and Walsh (2019) point out that several paradigms can be adopted as the philosophical foundation in social research, including pragmatism, critical realism, transformative paradigm, postmodernism, and feminism. The current study adopted pragmatism as the philosophical underpinning/assumption (Creswell, 2009). Pragmatism is a philosophical principle of achieving authentic knowledge regarding

the research questions' real truth and reality (Creswell, 2009). Its primary ideology or idea has been to employ the methodological approach that works best to understand the research problem under investigation and produce real-world solutions (Gray, 2014).

According to Gray (2014), the pragmatism philosophical movement was founded at the beginning of the twentieth-century by the American philosophers, Charles Pierce [1839–1914], William James [1842–1910] and John Dewey [1859–1952], to help American society face the many problems it was confronted with at the time. These problems included equity, freedom, and justice issues. These philosophers and several other scholars strongly rejected the traditional ideology or idea that the nature of reality can be assessed solely by using a single scientific method (AlWadi, 2013; Gray, 2014; Kaushik & Walsh, 2019; Kothari, 2004). These pragmatists asserted that the true nature of reality or the real world cannot be satisfactorily accessed using a single scientific method. This notion has contributed to the emergence of the mixed method approach. The use of multiple inquiry methods in the form of mixing approaches and methods has traditionally been viewed as the best way to investigate the nature of reality. Multiple and mixed methods were considered to provide a more holistic outcome of the inquiry by acknowledging both the objective and subjective views of reality.

Many modern researchers now argue that the nature of the research problem should help determine the most effective inquiry method. Scholars in the field of research methodology agree that a critical challenge for researchers is to choose the method that best addresses the research questions, produces valuable knowledge regarding the research phenomena, and achieves the study's objectives (Chenail, 2011; Denscombe, 2010; Flick, 2009). Therefore, a critical aspect of the social inquiry process is to recognise that personal life experiences shape reality. This reality is shared by the larger society of which individuals are members (Chenail, 2011; Kaushik & Walsh, 2019). Consequently, Kaushik and Walsh (2019) emphasise that pragmatists' primary objective should be to choose the research methods that best serve their research objectives, whether single-method, multiple methods, or a mix methods approach.

## **5.4. DIFFERENTIATING BETWEEN THE THREE MAJOR RESEARCH PARADIGMS**

Regarding the statistical methods used in the social and human sciences world, the literature highlights three types of research paradigms. These were as follows:

- i. Quantitative research;
- ii. Qualitative research;
- iii. Mixed methods research.

It is essential to distinguish these different types of research approaches used in the social and human sciences world.

### **5.4.1. Quantitative Research**

Quantitative research aims to describe social phenomena through systematic numerical means, such as applying mathematical or statistical processes (Wagner et al., 2012: 273). It is primarily deductive and objective in its approach, which involves testing theory or theories to generate the hypothesis that can explain the nature of reality. Deductive research is the logical reasoning process that moves from a general theory or theories to a specific situation or situations which follows from that same theory or theories (Sekaran & Bougie, 2013). Researchers hold different ontological positions or views of the nature of reality. The choice of research methodology is consequently influenced by the researcher's basic beliefs of the nature of reality.

Quantitative researchers are generally guided by objectivity, which assumes that only one objective reality exists external to the researcher (Gray, 2014; Maarouf, 2019). According to Baur (2019: 7), objectivity means that independent researchers studying the same social phenomenon always come to the same results, if the social phenomenon remains stable. Thus, quantitative researchers tend to emphasise the preservation of personal neutrality and impartiality within the research process to ensure as far as possible that replication of the study by the same researcher or other researchers can be achieved at a different time (Baur, 2019; Denscombe, 2010). The significance of the outcome of the research can be observed from different sampling techniques perspectives. Creswell (2009) asserts that establishing the

validity of data is a major concern of researchers. Consequently, the sampling strategies and approaches used are of overriding importance for scientific researchers.

#### **5.4.2. Qualitative Research**

As described above, qualitative research seeks to interpret or make sense of the phenomena in terms of the meanings that phenomena have for people (Wagner et al., 2012: 273), unlike quantitative research methodology where researchers describe phenomena through systematic numerical means (Creswell, 2009). Accordingly, the qualitative research methodology involves applying the inductive approach which emphasises subjectivity in the data collection, analysis, and interpretation procedures, to understand and explain multiple constructed realities of the research phenomena. Inductive research is a logical reasoning process that moves from a particular situation or situations to make or infer a general theory or theories (Sekaran & Bougie, 2013). Subjectivity is viewed as the opposite of objectivity which recognises the existence of multiple realities of those who live or experience the social phenomena being studied.

The concept of subjectivity in qualitative research is often equated with bias, which refers to the ways in which data collection or analysis are distorted by the researcher's theory, values, or preconceptions (Maxwell, 2005: 243). This idea of the potential for researcher bias in qualitative research makes researchers hesitant about choosing qualitative research over quantitative research as their method of inquiry. Qualitative research is often not regarded as internally valid as quantitative research because it is not subjected to rigorous quantitative analysis (Kothari, 2004). In this regard, the concept of 'critical subjectivity' plays a central role in enhancing researchers' ability to apply critical thinking to enhance the validity of their qualitative research (AlWadi, 2013).

Critical subjectivity is viewed as "a quality of awareness in which we do not suppress our primary experience; nor do we allow ourselves to be swept away and overwhelmed by it; rather we raise it to consciousness and use it as part of the inquiry process" (Reason, 1988: 12 cited in Maxwell, 2005: 225). Many recognised social science platforms and scholars generally submit/endorse the fact that researchers exert a degree of influence on the research process based on whatever research goals and purposes the researchers decide on using (Anwar, 2015;

Creswell et al., 2003; Denscombe, 2010; Maarouf, 2019; Maxwell, 2005; Walliman, 2011). In other words, it is not possible to obtain total objectivity or to eliminate the researcher's theory, preconceptions, or values from the research process. Maxwell (2005) suggests that opportunities for bias, particularly in qualitative research, can be minimised by the researcher's efforts to systematically acknowledge and document their biases, rather than striving to rise above them. Therefore, the concept of critical subjectivity is regarded as a fundamental quality to render the qualitative research data trustworthy (Levitt et al., 2018; Maxwell, 2005). Table 5.1 summarises some of the broad differences between quantitative and qualitative research methods.

**Table 5.1. Differences between Quantitative and Qualitative Methods**

	<b>Quantitative</b>	<b>Qualitative</b>
<b>Data</b>	<b>Numbers</b>	<b>Words</b>
Typical methods of data collection	Predefined options and closed questions in surveys, direct measurement, digital data collection	Open-ended questions in surveys and interviews, focus group discussions, observation, case studies
Analysis	Statistical data methods [averages, correlations, regression analysis]	Summarisation, reduction, and scoring; in-depth analysis of individual cases
Sampling	Large, random samples	Purposive [deliberate] sampling of most interesting cases
Indicators	Specific, measurable, numeric indicators	Broadly defined qualitative indicators or questions
Milestones and targets	Easy to define and to communicate	Hard to define and communicate
Baselines	Numeric collection and presentation of data	Narrative collection and presentation of data
Control or comparison groups	Often used in experimental or quasi-experimental methods	Rarely used in qualitative inquiry
Typical monitoring questions	How much? How many? How often?	How or why did something happen? For whom?
Data storage and processing	Data stored as numbers; large amount of automatic processing	Data stored as words or as attached reports; less automatic processing

Source: Simister & James (2020: 1)

As can be seen in Table 5.1, quantitative and qualitative approaches are conceptually, empirically, and methodologically distinct and independent. These two approaches are undoubtedly independent, yet they are interdependent in the context of answering more broad types of research questions concerning multiple realities (Gray, 2014; Johnson et al., 2007; Walliman, 2011). With the increasing number of mixed methods studies about resilience in the broader workplace context, it can be argued that mixing two research approaches might be a more valuable research strategy to explore the resilience of FAs in South Africa.

### 5.4.3. Mixed Methods Research

According to Creswell et al. (2003: 212), mixed methods research involves:

The collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research.

Its emergence has been influenced by the need to exclusively address the weaknesses of using quantitative and qualitative approaches. It is only when researchers are aware that they are social, behavioural, and human sciences researchers first, and they recognise the possibilities of there being multiple realities, that mixing both quantitative and qualitative approaches can be seen to offer robust evidence of the phenomenon being investigated (Almalki, 2016; AlWadi, 2013; Creswell et al., 2003; Denscombe, 2010; Maarouf, 2019).

According to Simister and James (2020), employing a mixed methods approach will enable researchers to build on the strengths, rather than weaknesses of the quantitative and qualitative research approaches. For instance, the quantitative approach generates numeric data including units, prices, proportions, rates of change and ratios. In contrast, the qualitative approach generates data in the form of natural language/words, such as statements, paragraphs, stories, case studies and quotations (Levitt et al., 2018; Mack et al., 2004; Simister & James, 2020).

However, mixed methods research must be attempted considering the nature of the phenomena and the need to illuminate and reveal different data types to help make the fullest sense of the research problem. Levitt et al. (2018: 40) cites the following as necessary processes and procedures that should be involved in a research process labelled as mixed methods research:

- i. Collecting and analysing both qualitative and quantitative data in response to overarching research aims, questions, and hypotheses;
- ii. Using rigorous methods for both qualitative and quantitative research;
- iii. Integrating or 'mixing' the two forms of data intentionally to generate new insights;
- iv. Framing the methodology with distinct forms of research designs or procedures;
- v. Using philosophical assumptions or theoretical models to inform the designs.

Given the above processes and procedures, it is acknowledged that collecting and combining multiple types of data from different research approaches might provide a much clearer picture of the research problem (Almalki, 2016; AlWadi, 2013; Creswell et al., 2003; Denscombe, 2010; Flick, 2009; Maarouf, 2019). Thus, a mixed methodological approach has been adopted as the statistical method to investigate this study's research problem. There are two primary reasons to conclude that using a mixed method approach adds more value than using a single method approach in this study (Creswell, 2009; Ndevu & Muller, 2017).

Firstly, the literature reviewed revealed that little has been written about FAs' resilience experiences in South Africa. Accordingly, this study recognises that the WEFs and PR factors identified in the literature may not truly represent the experiences of resilience of FAs in South Africa. A mixed method approach offers the opportunity to obtain deeper insights into the research problem using different methods. It is possible that using the mixed method approach can reveal different relevant factors that contribute to the experiences of resilience of FAs (Garcia-Dia et al., 2013; Montpetit & Tiberio, 2016).

Secondly, FAs' resilience in HEIs workplaces globally, has predominantly been explored using either a quantitative or qualitative approach exclusively. Moreover, the absence of resilience research in the context of FAs in SA calls for multiple different research methods. This fact provides researchers with the opportunity to develop good critical thinking while at the same time exploring the possibilities of contributing to new knowledge (Kaushik & Walsh, 2019). The WEFs identified in the literature highlights the need to adopt a mixed method inquiry by drawing upon the strengths of the quantitative and qualitative research approaches. The ability to use both close-ended and open-ended research instruments in this study has the benefits of providing a clear picture of the problem under investigation (Council on Higher Education, 2016b; Maodzwa-Taruvunga & Divala, 2014; Marshall & Morris, 2011; Rickinson, 2011; Wolhuter et al., 2013). Despite the many benefits of applying a mixed methods approach, it is noted that mixed methods research also comes with drawbacks.

Although mixed methods research might be similar in terms of the types of methods chosen, it is generally recognised that mixed methods studies are challenging to implement (Almalki, 2016; Creswell, 2009; Gray, 2014). The difficulty is because the strategies and procedures

used to guide the study are fundamentally different. Essentially, researchers must be knowledgeable about employing the two major approaches to social research [i.e., quantitative research and qualitative research]. Researchers need to know how mixing or combining two forms of data can offer a much deeper understanding of the research problem under investigation (Almalki, 2016; Creswell, 2009; Kothari, 2004; Levitt et al., 2018). It is noted by Kothari (2004: 8) that without properly understanding the assumptions underlying both quantitative and qualitative forms of research, the mixed method researcher would not know the criteria by which they can decide that certain techniques and procedures [i.e., mixed methods designs] will be applicable to certain problems and others will not.

The great challenge for mixed methods researchers is to tailor research designs which offer them solid bases to collect and analyse different types of data, which can then be combined to answer the research questions more efficiently (Creswell, 2009; Creswell et al., 2003; Denscombe, 2010; Johnson et al., 2007). Therefore, it was fundamental for this study to develop specific research questions based on both research approaches. Importantly, it was critical to relate and connect each approach's research questions around the broader aim, given the mixed methods research design adopted in this study.

## **5.5. TYPES OF MIXED METHODS DESIGNS**

It is generally accepted that research designs are an integral part of any scientific research endeavour. Research design is usually referred to as the procedures for collecting, interpreting, and reporting research data (Creswell & Plano Clark, 2007). Creswell and Plano Clark (2007) have identified four types of designs for mixed methods studies. These are: triangulation, embedded, explanatory, and exploratory designs. Furthermore, research methodology, when considering mixed methods research, researchers should consider four essential factors associated with mixed methods research that might influence the design of procedures of the mixed methods study (Almalki, 2016; Creswell, 2009; Creswell & Plano Clark, 2007; Creswell et al., 2003; Johnson et al., 2007; Kothari, 2004; Levitt et al., 2018). These are: timing, weighting, mixing, and notation. Table 5.2 summarises the different types of mixed method designs at a broader level and the variants associated with these categories.

**Table 5.2. The Major Mixed Method Designs [Typologies and Variants of Designs]**

Design Type	Variants	Timing	Weighting	Mixing	Notation
Triangulation	<ul style="list-style-type: none"> <li>• Convergence</li> <li>• Data transformation</li> <li>• Validating quantitative</li> <li>• Multilevel</li> </ul>	Concurrent: quantitative and qualitative at the same time	Usually equal	Merge the data during the interpretation or analysis	QUAN + QUAL
Embedded	<ul style="list-style-type: none"> <li>• Embedded experimental</li> <li>• Embedded correlational</li> </ul>	Concurrent or sequential	Unequal	Embed one type of data within a larger design using the other type of data	QUAN[qual] or QUAL[quan]
Explanatory	<ul style="list-style-type: none"> <li>• Follow-up explanations</li> <li>• Participants selection</li> </ul>	Sequential: Quantitative followed by qualitative	Usually quantitative	Connect the data between the two phases	QUAN → qual
Exploratory	<ul style="list-style-type: none"> <li>• Instrument development</li> <li>• Taxonomy development</li> </ul>	Sequential: Qualitative followed by quantitative	Usually qualitative	Connect the data between the two phases	QUAL → quan

Source: Creswell & Plano Clark (2007: 85)

The lack of clarity in classifying mixed methods research designs has dominated discussions about the value of mixed methods research. The clarity in this context refers to how to implement the design, what type of data to prioritise, which stage to integrate, and whether to use a theoretical lens to guide the design. Therefore, Creswell (2009) suggests six specific mixed methods designs based on four criteria: implementation, priority, integration, and theoretical perspective. It is noted that these criteria are particularly helpful when researchers are unsure about which design might be most applicable to their research study. The six designs according to Creswell (2009: 224) are organised around whether the data are collected sequentially [explanatory and exploratory], concurrently [triangulation and nested], or with a transformative lens [sequential or concurrent]. The six types of design strategies and the four criteria implicit in each design strategy are presented in Table 5.3.

**Table 5.3. Types of Designs by Four Criteria**

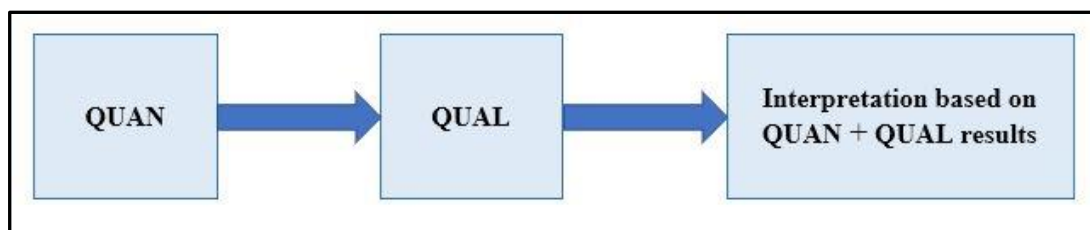
<b>Design Type</b>	<b>Implementation</b>	<b>Priority</b>	<b>Stage of Integration</b>	<b>Theoretical Perspective</b>
Sequential explanatory	Quantitative followed by qualitative	Usually quantitative; can be qualitative or equal	Interpretation phase	May be present
Sequential exploratory	Qualitative followed by quantitative	Usually qualitative; can be quantitative or equal	Interpretation phase	May be present
Sequential transformative	Either quantitative followed by qualitative or qualitative followed by quantitative	Quantitative, qualitative, or equal	Interpretation phase	Definitely present [i.e., conceptual framework, advocacy, empowerment]
Concurrent triangulation	Concurrent collection of quantitative and qualitative data	Preferably equal; can be quantitative or qualitative	Interpretation phase or analysis phase	May be present
Concurrent nested	Concurrent collection of quantitative and qualitative data	Quantitative or qualitative	Analysis phase	May be present
Concurrent transformative	Concurrent collection of quantitative and qualitative data	Quantitative, qualitative, or equal	Usually analysis phase; can be during interpretation phase	Definitely present [i.e., conceptual framework, advocacy, empowerment]

Source: Creswell et al., (2003: 179)

The next section describes the research design adopted in this study, namely the sequential explanatory research design, followed by a detailed discussion of the two-phase approaches and methods used in this study.

## 5.6. THE SEQUENTIAL EXPLANATORY RESEARCH DESIGN





The sequential explanatory design was prioritised over the other designs due to the explanatory nature of this study. According to Creswell (2009: 211), a sequential explanatory design occurs when the collection and analysis of quantitative data in a first phase of research is followed by the collection and analysis of qualitative data in a second phase of research. Figure 5.1 is a diagrammatic representation of the sequential order of the sequential explanatory research design components. The application of this design in terms of this study is illustrated in Table 5.4.



**Figure 5.1. Sequential Explanatory Research Design**

Source: Creswell and Plano Clark (2007: 73)

**Table 5.4. A Mixed Method Sequential Explanatory Study to Explore Workplace Environmental Factors Affecting Female Academics' Psychological Resilience**

Phase/Stage	Procedure	Outcome
QUAN data collection 	<ul style="list-style-type: none"> <li>Questionnaire of WEF Affecting PR of female academics</li> </ul>	<ul style="list-style-type: none"> <li>Numeric data</li> <li>Participant demographics</li> </ul>
QUAN data analysis 	<ul style="list-style-type: none"> <li>STATA statistical software programme</li> <li>Independent t-tests</li> <li>Analysis of Variance</li> <li>Spearman's correlation coefficients</li> </ul>	<ul style="list-style-type: none"> <li>Descriptive statistic</li> <li>Assessments of relationships amongst variables &amp; participants' demographics</li> <li>Descriptive &amp; inferential database of WEFs Affecting PR of female academics</li> <li>Identify results for QUAL phase</li> </ul>
QUAL data collection 	<ul style="list-style-type: none"> <li>Develop an interview guide based on QUAN results</li> <li>Selection of participants for in-depth interviews</li> <li>Conduct interview with participants</li> </ul>	<ul style="list-style-type: none"> <li>Interview guide</li> <li>Transcribed interview</li> <li>Uploaded data</li> </ul>
QUAL data analysis 	<ul style="list-style-type: none"> <li>NVivo Data Analysis               <ul style="list-style-type: none"> <li>Coding and thematic analysis</li> <li>Theme development</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Codes and themes</li> <li>Coding matrix</li> <li>New conceptual model of WEF Affecting PR of female academics from emerging themes</li> </ul>
Interpretation and Integration of QUAN and QUAL Findings	<ul style="list-style-type: none"> <li>Integration of quantitative and qualitative findings</li> </ul>	<ul style="list-style-type: none"> <li>Discussion of findings</li> <li>HRM strategy recommendations</li> <li>Implication on practice</li> <li>Future research</li> </ul>

## **5.7. STUDY POPULATION AND POPULATION FRAME**

A study population refers to the entire group of people, events, or things that the researcher desires to investigate (Sekaran & Bougie, 2013: 397). It is generally accepted that the complete investigation of an entire population is generally not possible due to time and financial constraints (Kothari, 2004; Sekaran & Bougie, 2013; Wagner et al., 2012). For this reason, researchers are expected to properly select a representative sample from the desired research population to try and obtain sufficiently accurate results and draw conclusions about the entire population. In this context, the term ‘sample’ refers to a subset or subgroup of a research population (Wagner et al., 2012). It is also important to distinguish the term ‘population’ from the term ‘population frame’, which lists all the elements in the population from which the sample is drawn (Sekaran & Bougie, 2013: 397). The population frame is handy for estimating an acceptable research sample size. A population frame is the actual number of people, events or things that reflect the entire population. In this regard, the population frame for this study consisted of currently employed FAs at UKZN.

### **5.7.1. Sample Size**

The process of estimating the sample size can be an intricate one, requiring both knowing the existing population size [N], and using a credible and reliable sampling design or measurement of the sample size to determine the appropriate sample size [S] for the study. To define this study’s sample size, the researcher applied the Krejcie and Morgan’s Table, which has been devised for determining the sample size in a given population (Sekaran & Bougie, 2013). The researcher used UKZN’s four colleges as strata to determine the study’s overall sample size in the first phase (Sekaran & Bougie, 2013). Therefore, to ensure that the sample size per UKZN college [stratum] was proportional to the total number of FAs per college, and was representative of the overall population of FAs at UKZN, a stratified random sampling calculation was performed (Sekaran & Bougie, 2013).

A preliminary attempt was made to estimate the study’s sample size based on an unpublished and not publicly available 2018 UKZN Institutional Report acquired from the university’s register. The report indicated that the population across UKZN’s four campuses consisted of 620 FAs. This report was anonymous and served to define the size of the sub-population to be

targeted per college. An aggregate preliminary sample size of 278 for a total population of 620 FAs was calculated originally, as illustrated in Table 5.5.

**Table 5.5. Preliminary Estimated Sample Size**

<b>Name of College</b>	<b>Proportion of Population</b>	<b>Stratified Random Sampling Calculation</b>	<b>Sample Size Phase-one</b>	<b>Sample Size Phase-two</b>
College of Humanities	207	$207 \div 620 \times 278$	93	10-12
College of Agriculture, Engineering and Science	101	$101 \div 620 \times 278$	45	10-12
College of Health Sciences	197	$197 \div 620 \times 278$	88	10-12
College of Law and Management Studies	115	$115 \div 620 \times 278$	52	10-12
Total	$N = 620$		$S = 278$	$S = 40-48$

An updated version of the above table was calculated subsequently. The up-to-date sample calculation considered the records of female academic staff members available on the UKZN website. The data was effectively checked, based on the information available on each of the UKZN's college's dedicated webpage. Specifically, a population size of 452 was identified. A passable revised sample size of 210 has been calculated, as shown in Table 5.6.

**Table 5.6. Updated Population and Sample Calculation**

Name of College	Proportion of Population	Stratified Random Sampling Calculation	Sample Size Phase-one	Sample Size Phase-two
College of Humanities	181	$181 \div 452 \times 210$	84	10-12
College of Agriculture, Engineering and Science	67	$67 \div 452 \times 210$	31	10-12
College of Health Sciences	105	$105 \div 452 \times 210$	49	10-12
College of Law and Management Studies	99	$99 \div 452 \times 210$	46	10-12
Total	$N = 452$		$S = 210$	$S = 40-48$

This comparison demonstrates significant differences between the original and updated population and sample calculations. These differences may be explained by differences between the members who might have left the university and the members who recently joined the university. In principle, there is an agreement that the sampling frame may not always be a current or up-to-date document (Sekaran & Bougie, 2013). This fact can present problems in determining the appropriate sample size.

To specifically explain the importance of getting the population and sample size right, the concept called ‘coverage error’ was introduced. This error occurs when there is a mismatch between the sampling frame and the population (Phillips, 2013; Sekaran & Bougie, 2013). Sekaran and Bougie (2013) advise that researchers should deal with this error by either redefining the target population in terms of the sampling frame, screening the respondents with respect to important characteristics to ensure that they meet the criteria for the target population, or adjusting the collected data by weighting a scheme to counter-balance the coverage error. In line with these factors, it appears that Table 5.6 is more reflective of the population of FAs captured by the sampling process (Sekaran & Bougie, 2013: 245). Table

5.6 was regarded as being a more representative FAs population sample from the UKZN at the time of the study. Furthermore, it is important to observe that Table 5.6 follows a similar order of the number of FAs per college like Table 5.5, which suggests that the numbers presented in Table 5.6 are more realistic. This further implies that the preliminary sample calculated in Table 5.5 may be an inaccurate representation of the FAs' population at the time of the study.

## **5.8. FIRST PHASE: QUANTITATIVE APPROACH**

The first phase of this mixed method study used the quantitative approach, which focused on gathering numerical data to offer insights that could then inform the second phase. It is important to note that data from a quantitative approach does not provide depth or richness of information on the phenomenon under investigation, as in the case of qualitative approach. However, in general, this approach is useful where researchers need to pose identical questions in the same order to all respondents to show cause and effect or a relationship between variables.

### **5.8.1. The Study's Subjects/Respondents: Phase-One**

The sampling procedure involved in quantitative research is random sampling. This sampling procedure is applied when it is necessary to give each element in the population an equal probability of being selected so that the sample can be generalised to the larger population (Creswell, 2009; Creswell & Creswell, 2018; Salkind, 2017). An average total of 135 participants from across the four colleges within UKZN responded to the survey [i.e., those who have gone through the entire survey and completed it] in phase-one. The survey statistics records indicated that a total of 162 respondents started the survey but did not complete the survey. These results suggest that the response rate/completion rate for this study's survey was 83%.

#### **5.8.1.1. Inclusion Criteria**

- i. UKZN female academic staff irrespective of marital and family status.
- ii. Female academics [namely junior lecturers, senior lecturers, associate professors, and full professors].
- iii. South Africans and foreign nationals [female academics].

- iv. Female academics who have at least two [2] years of experience in an academic profession.

#### 5.8.1.2. Exclusion Criteria

- i. UKZN male academic staff.
- ii. UKZN non-academic staff.
- iii. Female academics who do not have at least two [2] years of experience in an academic profession.

#### 5.8.2. Data Collection Instruments

This study adopted a pragmatic approach which encourages researchers to enhance the appropriateness of measurement tools to best address the research problem (Creswell, 2009). The pragmatic philosophy not only implies the ability to use both post-positivism and constructionism perspectives in a single study; but it also means that researchers are allowed more flexibility and reflexivity to investigate the origins and solutions of the research problem unlike other research paradigms (Kaushik & Walsh, 2019; Olaghere, 2022).

The quantitative data in phase-one of this study were collected through online questionnaires [between 20 April 2020 to 14 July 2020]. Questionnaires [also known as surveys] are useful research instruments or tools used to gather data quantitatively from people who have met the study's criteria (Åkerblad et al., 2021; Dawadi et al., 2021; Walliman, 2011). A questionnaire may consist of closed-ended questions and open-ended questions to collect information from the targeted research sample (Creswell & Creswell, 2018; Denscombe, 2010). There are a few advantages in using a questionnaire to obtain data (Baur, 2019; Denscombe, 2010; Kothari, 2004; Walliman, 2011). Firstly, it offers researchers the ability to structure a standard set of questions and obtain responses without speaking to every respondent. Secondly, it is a relatively cheap and less time-consuming method to receive information from a large sample, mainly when delivered in an electronic format via e-mail or an internet-based programme. Thirdly, biases of positive responses could be decreased due to using a standard set of questions to all respondents anonymously. Lastly, responses might be used as guidelines for follow-up interviews to clarify survey responses in mixed methods research or multi-methods research.

### **5.8.3. Questionnaire [Phase-One]**

The first phase of the study was guided by the following five research questions:

#### **5.8.3.1. Quantitative Research Questions**

- i. What is the general perceived level of psychological resilience among female academics in the context of their workplace environments?
- ii. What workplace environmental factors do female academics identify as the highest contributors of their experiences of negative mental health outcomes?
- iii. To what extent do female academics experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors?
- iv. To what extent do female academics experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?
- v. What possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors-related negative mental health outcomes, and building blocks of psychological resilience?

Considering the above research questions, and to elicit quantitative data in the first phase, FAs were invited to complete an online questionnaire. The questionnaire was designed to contain the WEFs examined in chapter two, the PR and NMHOs variables reviewed in chapter three and four, and the adapted items of the original Connor-Davidson Resilience Scale [CD-RISC] [to assess respondents' perceived level of PR] (Connor & Davidson, 2003).

#### **5.8.4. Validity and Reliability of the Quantitative Data Collection Instrument**

The CD-RISC is a brief, self-rated measure of resilience with sound psychometric properties (Connor & Davidson, 2003). It comprises of 25 items, all of which are rated from “not true at all” [1 point] to “true nearly all the time” [5 points]. In their original study [based on a general population of 577 subjects], Connor and Davidson (2003) reported that the CD-RISC has good internal consistency [ $\alpha=0.89$ ], and satisfactory test-retest reliability [ $r=0.87$ ]. Previous studies

across different adult populations confirm the CD-RISC scale's internal validity and reliability (Campbell-Sills & Stein, 2007; Kim et al., 2013; Montero-Marin et al., 2015; Nie et al., 2017; Sexton et al., 2010). The original of the CD-RISC was modified slightly to capture the female academic respondents' perceived resilience, specifically related to their work experience at the UKZN's workplace environment. As such, to further confirm research validity and reliability, a pilot study was undertaken.

#### **5.8.4.1. Pilot Study**

A pilot study can be defined as a “pre-test of a questionnaire or other type of survey on a small number of cases in order to test the procedures and quality of responses” (Walliman, 2011: 175). Conducting a pilot study is meaningful due to the potential to increase the validity of the research process (Bolderston, 2012). It typically entails testing the data collection instrument with a small number of people to modify any poorly worded or confusing questions before the main data gathering process occurs (Bolderston, 2012; Kothari, 2004). As further noted by Olivier (2017), pilot studies should aim to promptly address potential flaws in the research design, which could jeopardise the study's overall validity and reliability. Given this, the questionnaire was pilot-tested on five FAs based at UKZN's Westville campus. The piloted participants were provided with an explanation of the study's aim. They then were asked to sign a written consent form to confirm their agreement to participate. Specifically, the participants were requested to comment on four aspects namely: [1] did they understand the instructions given to complete the questionnaire, [2] was the correct biographical information requested from participants, [3] was the terminology used appropriate for the academic context, and [4] did participants understand the questions posed. The questionnaire was modified based on the constructive feedback obtained from the piloted participants, which entailed: removing redundant or ambiguous items from the demographic data in section A; adjusting and rephrasing some of the survey items in section B for clarity and comprehensibility; refining and rephrasing the introduction part within each section so that the survey was completed within a reasonable period of time.

Over and above the constructive feedback, participants were asked to provide genuine answers to all questions in the questionnaire, the results of which were essential to developing an initial understanding of the relevance of the concept of WEFs and their impact on FAs' PR.

### 5.8.5. Questionnaire Survey Design

The survey questionnaire was designed to be distributed using the QuestionPro platform, an internet-based survey tool. To comply with the gatekeeper's approval instructions to not use the Microsoft Outlook address book to e-mail university staff directly, the questionnaire was uploaded and made available on the UKZN's notice system website on the 20 April 2020.<sup>6</sup> Thereafter, the questionnaire was published 15 times between 20 April 2020 to 14 July 2020 to reach more respondents. Essentially, the idea was that each time the questionnaire survey would successfully be uploaded to the UKZN's notice system, FAs across all UKZN's colleges would receive an e-mail containing the link to the notice with a request to complete the questionnaire.<sup>7</sup> This also meant that prospective respondents had to be available and willing to complete the survey when receiving the university system's e-mail notice.

The online notice opened with a general information page that explained the purpose of the study, the aim and objectives of the survey, and information relating to informed consent. The notice also contained a QuestionPro link to enter the survey if the target sample agreed to participate in the study. The notice explained that by clicking on the survey link, respondents were indicating their consent to participate. A copy of the gatekeeper's approval and a copy of the ethical clearance were attached to the survey's notice on the UKZN's notice system, providing participants with information about the gatekeeper's approval and the ethical clearance obtained for carrying out this study.<sup>8</sup> The questionnaire consisted of 52 items, divided into the four sections: A, B, C, and D.<sup>9</sup> To assure the participant's confidentiality, all questions within the questionnaire were kept anonymous. The researcher projected that it would not take more than 15 minutes to complete the questionnaire survey.

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<sup>6</sup> See: <http://notices.ukzn.ac.za>

<sup>7</sup> See: Appendix C.

<sup>8</sup> See: Appendix A and Appendix L.

<sup>9</sup> See: Appendix D.

#### 5.8.5.1. Section A: Demographic Data [12 Items]

The starting point of the questionnaire in section A was to obtain demographic data to establish contextual information about participants as women academic professionals. This information was used exclusively for statistical purposes. The demographic information is a fundamental part of the process of understanding the composition of women academics at the University of KwaZulu-Natal [UKZN], in terms of psychological resilience experiences at UKZN (Flick, 2009; Kothari, 2004). Participants were asked to provide general information about their age group, race, relationship status, number of children, home province or home country, highest level of academic qualification attained, tenure within the industry, tenure within the institution, appointment designation, type of employment contract, home college at the institution, and home campus at the institution.

#### 5.8.5.2. Section B: The Connor-Davidson Resilience Scale [CD-RISC] [25 Items]

In this section, participants were asked to indicate their perceived PR level from a list of statements. The statements formed part of the resilience scale known as the Connor-Davidson Resilience Scale [CD-RISC] utilised in this study and were slightly adapted to emphasise the participants' resilience experiences within the context of the UKZN's workplace environment.

#### 5.8.5.3. Section C: Workplace Environmental Factors [WEFs] in Higher Education Institutions [HEIs] [8 Items]

This section focused on assessing how the various WEFs identified in the literature within the context of HEIs might affect the psychological resilience, and the well-being of FAs at UKZN. Section C included the following eight key WEFs:

- i. Teaching demands;
- ii. Research demands;
- iii. Administrative demands & skewed workloads;
- iv. Knowledge, skill, and ability [KSAs];
- v. Professional & personal networking;
- vi. Coaching support;
- vii. Mentoring support;

viii. Compensation & rewards.

The aim was to establish the extent to which the WEFs could have resulted in negative mental health outcomes [NMHOs] such as stress, depression, anxiety, burnout, and compassion fatigue (Rees et al., 2015: 5).

5.8.5.4. Section D: The Model of Individual Workforce Resilience [9 Items]

This section was divided by sub-sections D1 and D2. It dealt with the fundamental concepts highlighted in the model of individual workforce resilience developed by Rees et al. (2015: 4) applied in this study. A short definition/description of each concept listed in sub-sections D1 and D2 was also provided to help respondents appreciate each concept's meaning and context and enhance their response quality.

5.8.5.4.1. *Sub-Section D1: Negative mental health outcomes [NMHOs] [5 items]*

In sub-section D1, the five NMHOs indicated in Rees et al. (2015: 4) model of resilience [i.e., stress, depression, anxiety, burnout, and compassion fatigue] were listed. The participants were asked to respond to each listed outcome/item by indicating the extent to which they had felt each outcome at UKZN.

5.8.5.4.2. *Sub-Section D2: Building blocks [determinants] of psychological resilience [4 items]*

In sub-section D2, the four building blocks of resilience as per Rees et al. (2015: 4) model of resilience [i.e., neuroticism, mindfulness, self-efficacy, and coping] were listed. The participants were asked to respond to each building block of resilience/item by indicating the extent to which the participants identified with a specific building block of resilience as contributing to their resilience experiences.

Apart from the demographic section A, the items in sections B, C, and D in the questionnaire have been structured on a five-point Likert-type scale, as shown in Figures 5.2 and 5.3. The questionnaire also considered the unique experiences of FAs with regards to the primary study variables. As such, the respondents were encouraged to list any additional WEFs, NMHOs

and building blocks of resilience which they thought were important, but were not included in section C and section D [sub-sections D1 and D2] of the questionnaire.

<b>Not true at all</b>	<b>Rarely true</b>	<b>Sometimes true</b>	<b>Often true</b>	<b>True nearly all of the time</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Figure 5.2. Five-Point Likert-Type Scale Response Items [Section B]**

<b>To little or no extent</b>	<b>To a limited extent</b>	<b>To some extent</b>	<b>To a considerable extent</b>	<b>To a great extent</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Figure 5.3. Five-Point Likert-Type Scale Response Items [Sections C, and D]**

### **5.8.6. Data Analysis**

Data analysis is the art of examining available research data to draw conclusions about the study (Chenail, 2011; Creswell & Plano Clark, 2007; Sekaran & Bougie, 2013). The data collected in phase-one was entered into the STATA statistical computer software program. Thereafter, data concerning the WEFs affecting FAs’ PR, and the perceived PR of FAs were analysed using descriptive statistics measurements, including independent t-tests, analysis of variance, and Spearman’s rank correlation coefficient (Salkind, 2017; Sekaran & Bougie, 2013).

## **5.9. SECOND PHASE: QUALITATIVE APPROACH**

Qualitative data was collected in phase-two of the study [between 09 February 2021 to 05 March 2021]. The aim and purpose of the qualitative phase was to add depth and richness to the phase-one quantitative results (Campbell, 2020; Creswell & Creswell, 2018; Mumba, 2021).

### **5.9.1. The Study's Participants: Phase-Two**

According to Creswell (2009: 217), purposeful sampling is used in qualitative data collection so that individuals are selected because they have experienced the central phenomenon under study. Therefore, only respondents who completed the questionnaire survey in phase-one and who at the end of the survey volunteered to participate in phase-two were contacted to participate in phase-two of the study. In this regard, the qualitative phase sample consisted of 27 volunteered participants out of 135 respondents who took part in the quantitative phase. As mentioned earlier, given the mixed method sequential explanatory research design applied, the key objective in phase-two of the study was to follow-up and understand the respondents' experiences of resilience in more depth. Thus, while the respondents may indicate a desire to participate in the second phase of a study, researchers should make every effort to achieve validity. Kothari (2004: 73) states that validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. Accordingly, to ensure the research design's internal validity, the researcher has purposively selected participants who met the inclusion criteria in phase-two as listed below.

### **5.9.2. Interview Participation Criteria**

- i. Have related to at least one of the WEFs listed in the questionnaire as potential factors affecting their PR.
- ii. May have proposed a different WEF as a potential factor affecting their experiences of resilience.
- iii. Have obtained meaningful PR scores as per the proposed PR model, i.e., lower scores in mindfulness, self-efficacy and coping, and a higher score in neuroticism or *vice-versa*.
- iv. May have proposed a different PR dimension as significant in their resilience experiences.

### **5.9.3. Data Collection Instruments**

Three data collection instruments have been emphasised by Mack et al. (2004) as the most common qualitative methods used to acquire qualitative data. They are: in-depth interviews, participant observation, and focus groups. According to Mack et al. (2004: 2), in-depth

interviews are optimal for collecting data on individuals' personal histories, perspectives and experiences, participant observation and focus groups. Participant observation is appropriate for collecting data on naturally occurring behaviours in their usual contexts. Focus groups are effective in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or sub-groups represented.

Given this study's context, the data collection instrument used in the qualitative follow-up phase was the in-depth interview. An in-depth interview is described as a technique designed to elicit a vivid picture of the participant's perspective on the research topic (Mack et al., 2004: 29). Through in-depth interviews, the researcher sought to provoke the participants to tell a story of their own resilience experiences at UKZN. More specifically, in-depth interviews exploring the WEFs affecting FAs' PR were undertaken with 27 FAs to explain the quantitative results and deepen understanding of the research phenomenon.

#### **5.9.4. In-Depth Interviews [Phase-Two]**

In the follow-up phase-two, in-depth semi-structured interviews were designed to explore how potential WEFs affect FAs' PR and elicit suggestions of HRM interventions.<sup>10</sup> The interviewing process was initially designed to last approximately 30–45 minutes; however, the interviews took on average 1.5 hour to complete. This was due to the nature of the qualitative follow-up phase-two of the study, as well as the change of the interview process from individual face-to-face interviews to on-line Zoom video-conferencing interviews, due to the Covid-19 pandemic regulations and lockdown restriction levels that were put in place. The following two research questions formed the basis of the interview schedule/topic guide used in the second phase of the study.

#### **5.9.5. Qualitative Research Questions**

- i. How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?

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<sup>10</sup> See: Appendix F.

- ii. How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?

#### **5.9.6. Interview Design**

Initially, the researcher had planned to hold individual face-to-face interviews to collect qualitative data during phase-two, prior to the Covid-19 global pandemic (Bolderston, 2012). Due therefore to the health regulations and protocols issued by the Research Office of the University of KwaZulu-Natal, no physical contact was allowed between the interviewer and the interviewees. This required an urgent change to the qualitative data gathering method being implemented (Lobe et al., 2020). Therefore, one-on-one interviews were conducted remotely instead of face-to-face interviews [as initially planned] to adapt to Covid-19 social distancing protocols.

A remote interview can be understood as an alternative method for collecting qualitative data without the essential participants [interviewer and interviewee] meeting one another physically. Remote interviews can be conducted using different methods of preference to both researchers and research participants and may include online platforms such as video-conferencing [for example: Skype, Zoom, WhatsApp Messenger Voice/Video calls], telephone, e-mail, and open-ended surveys (Bolderston, 2012; Greeff, 2020; Lobe et al., 2020). In terms of this study, Skype or Zoom online video-conferencing interviews were the preferred interview methods to use in phase-two of the study. The primary advantage of using any of these methods is that they help simulate the experience of a face-to-face interview, offering some sense of human connection through the visual contact between the researcher and the participant. These methods are also useful in capturing nonverbal reactions from participants during the interviewing and feedback processes (Greeff, 2020; Lobe et al., 2020).

#### **5.9.7 Data Analysis**

Since this study adopts the pragmatic philosophical assumption or worldview, using the thematic data analysis method in phase-two was appropriate. The thematic analysis method involves identifying and analysing excerpts from the data collected, presenting them into

meaningful themes, and reporting them as research findings (Braun & Clarke, 2021; Finlay, 2021; Kiger & Varpio, 2020; Salkind, 2017). This process has been conducted in conjunction with the NVivo qualitative data analysis computer software package to allow the richness of the qualitative data to emerge (Campbell, 2020).

#### **5.10. INTEGRATION OF QUANTITATIVE AND QUALITATIVE APPROACHES**

Integration has been identified as one of the most important criteria for a study to be called a mixed method study (Åkerblad et al., 2021; Chenail, 2011; Creswell et al., 2003; Hands, 2022; Olaghere, 2022; Rai, 2018). Integration has been defined as “the combination of quantitative and qualitative research within a given stage of inquiry” (Creswell et al., 2003: 173). To reiterate, a mixed method study is one which involves:

The collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research (Creswell et al., 2003: 212).

As noted, and examined in the research design section, the present study followed a mixed method sequential explanatory research design comprising of two phases. To put it another way, priority was accorded to the quantitative approach in the first phase of the study to explore the various factors identified in the literature review objectively. It has been noted previously that a single method of research design [quantitative approach or qualitative approach] might elicit insights into how WEFs may affect the PR of women in academia. As examined in the previous sections, each of the two distinct approaches seek to address different types of research questions. The approach chosen should be dependent upon the context of the study.

It is acknowledged that employing a mixed method approach can sometimes be difficult because both the quantitative and qualitative approaches carry their own challenges (Almalki, 2016; AlWadi, 2013; Baur, 2019). The challenges translate into researchers’ extra effort to gather, analyse, and interpret different data forms and effectively integrate or combine the different research results. Consequently, the big challenge for mixed method researchers might lay in demonstrating integration at one or more stages of the research process. Not surprisingly, it is noted that in many instances researchers prefer employing one single research method

design to study the research phenomena (Almalki, 2016; Creswell et al., 2003; Kothari, 2004). Again, it should be noted that any approach employed in a study should be employed given the actual nature of the research problem (Flick, 2009; Walliman, 2011).

The fact that research generally suggests that a single approach might not necessarily capture the full picture of the research problem has led to suggestions that employing a mixed method approach might provide an increased understanding of the research problem. Employing both approaches in one study is thought to capture more promising insights relating to PR. This is likely due to the apparent importance of integrating data at more than one stage of the research process (Åkerblad et al., 2021; Almalki, 2016; Creswell et al., 2003; Denscombe, 2010; Hands, 2022; Johnson et al., 2007; Olaghere, 2022; Rai, 2018). In the case of this study, three ways of integration were at play: the research questions, findings, and sample.

#### **5.10.1. Integration of Research Questions and Links to the Theoretical Literature**

The nature of the explanatory mixed method design allows for the quantitative and the qualitative phases to be conducted separately (Almalki, 2016; Creswell, 2009; Creswell & Creswell, 2018; Creswell et al., 2003; Johnson et al., 2007). In this study, the quantitative phase represented the platform to inform the qualitative phase. All the WEFs identified in the literature as potential factors that might impact FAs' resilience have helped develop the quantitative phase research questions. Moreover, the development of the questionnaire in phase-one had theoretical implications for planning and developing the interview schedule used in the qualitative phase-two to help explain the quantitative results. In turn, the process of formulating the study's quantitative research questions provided the researcher with an opportunity to consider a range of potential thematic areas [not identified in the literature] to explore in phase-two of the study. By examining the existing theoretical literature in the field, the researcher was able to form an understanding of the research problem and establish a link between the two phases of the study on the level of research questions. Therefore, this overall process is taken as an indicator of integration at the onset of the research process.

#### **5.10.2. Integration of Findings**

The integration of findings has been identified as the most crucial aim of mixed methods studies since mixed methods research is based on the premise that generating findings and mixing or

combining findings from different research approaches within a single study might provide new ways of understanding research problems than either research approach findings alone might offer (Creswell et al., 2003; Dawadi et al., 2021; Denscombe, 2010). The qualitative phase's data collection process depends on the quantitative phase-two results since this study used a sequential approach. As such, the integration of findings occurs only after both the collection and analysis of the quantitative and qualitative data have taken place. The findings from phase-one and phase-two are presented in separate chapters of the study [chapter six and chapter seven]. Chapter eight is dedicated to provide an integrative review and discussion of the quantitative findings [i.e., phase-one questionnaires] and the qualitative findings [i.e., phase-two interviews]. Chapter eight also allowed side-by-side comparisons for consistencies or discrepancies between the quantitative and qualitative data.

### **5.10.3. Integration of Sample**

Besides the integration of research questions and research findings, sample integration from phase-one to phase-two is usually expected to yield reliable meta-inferences (Dawadi et al., 2021; Johnson et al., 2007; Rai, 2018). Creswell et al. (2003: 171) has summarised the rationale and importance of sample integration as follows:

When quantitative data precede qualitative data, the intent is to explore with a large sample first to test variables and then to explore in more depth with a few cases during the qualitative phase.

It is noted that the quantitative approach uses a larger sample size, while the qualitative approach uses a smaller sample size (Kothari, 2004; Mumba, 2021; Rai, 2018; Salkind, 2017; Walliman, 2011).

The researcher used the quantitative data to define the qualitative sample to further explore the problem under study. As indicated earlier, at the end of the questionnaire in phase-one, respondents were asked to volunteer to participate in the study's phase-two. In this respect, prior to the process of collecting qualitative data, the researcher selected a sample for phase-two. Those respondents who had indicated an interest to take part in the second phase, and who had met the inclusion criteria, formed part of the phase-two sample. Within the context of this study, involving the same sample in both phases of the study had a critically important

role in maximising the credibility of the results from both research approaches (Creswell & Plano Clark, 2007). It provided the researcher with opportunities to generate more meaningful recommendations for possible HRM interventions.

### **5.11. ETHICAL CONSIDERATIONS**

The term ‘ethics’ refers to the moral principles that determine how individuals think and act in particular situations (Anwar, 2015: 23). The term ‘ethics in research’ [also known as research ethics] implies the ethics of how a researcher or group of researchers carries out their research work (Anwar, 2015: 23). According to Walliman (2011), all researchers involved with research involving human participants [i.e., social science research and medical research] need to be particularly sensitive about ethical behaviour issues. It is suggested that there is always the risk that researchers might perpetrate abuses or make mistakes of real consequence for the people they study (Creswell & Creswell, 2018; Mack et al., 2004; Wagner et al., 2012). Moreover, as Mack et al. (2004) have asserted, researchers often come across genuine ethical dilemmas and need to choose between harming a participant and harming the research.

Walliman (2011) concurs that social science research often impinges on other people’s sensibilities and rights. Walliman (2011) stresses that researchers should have an increased awareness of the necessary ethical standards to avoid any harm inherent in carrying out or publishing the research project results. The prominent examples of harm in research include: physical harm, harm to the participants’ development or self-esteem, stress, harm to career prospects or future employment, and inducing subjects to perform reprehensible acts (Walliman, 2011: 25). The fundamental aim of ethical research is to avoid causing harm to participants and ensure that the knowledge generated from the research project might produce some positive outcomes for the research participants and the wider public or community (Mack et al., 2004; Mumba, 2021; Olaghere, 2022; Walliman, 2011).

To detect or prevent deviations from ethical conducts in research undertakings, relevant ethics committees have been established in universities and independent professional associations (Creswell & Creswell, 2018). According to Walliman (2011), ethics committees develop/formulate research ethics codes of conduct to monitor research ethics applications. They assess how research proposals intend to address the participants’ rights and interests. By

establishing an ethics code of conduct, members of the ethics committee can oversee the conduct and ethicality of the research work done within their institutions (Flick, 2009; Walliman, 2011). Furthermore, ethics committees have the responsibility of ensuring the soundness of the research design and the appropriateness of methods before they can be applied (Flick, 2009; Walliman, 2011).

Ethical clearance from the UKZN Humanities and Social Sciences Research Ethics Committee<sup>11</sup> and the Gatekeeper's approval from UKZN<sup>12</sup>, which required the submission of a full research proposal, were sought, and obtained prior to commencement of the study. Subsequent to the ethical clearance approval, and to adhere to ethical standards before participation, the researcher posted a notice to the UKZN notice system website, advertising the study in order to gather quantitative data from a potential sample of FAs across UKZN's four [4] colleges. The notice link opened with an information page explaining the purpose of the study, the value of FAs' participation, and ethical considerations involved. Specifically, the information page informed participants of the following ethical measures considered and taken regarding their participation in this study:

- i. Participation in this study was entirely voluntary, and the participants had the right to withdraw from the survey/study at any point.
- ii. There were no foreseeable risks associated with this project. There were no incentives or reimbursements for participation in the study.
- iii. Survey responses were kept strictly confidential and anonymous, and data from this research were reported only in the aggregate.
- iv. The survey data were coded, kept securely in a password-protected computer with restricted access to the researcher, and destroyed within five years of completing this study to protect the participants' anonymity.
- v. At the end of the notice, a link to the survey was provided. The participants were informed that by clicking on the survey link and responding to the survey, they also indicated their consent to participate.

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<sup>11</sup> Appendix L. Approval No.: HSSREC/00000022/2019.

<sup>12</sup> See: Appendix A

- vi. At the end of the survey, respondents were invited to volunteer to participate in the second phase of the study.
- vii. Relevant research documents [i.e., Gatekeeper's approval, and Ethical approval] were attached to the notice.

The following ethical measures were subsequently applied in the second phase of the study:

- i. The respondents who were involved in the questionnaire survey in phase-one and who at the end of the survey volunteered to participate in phase-two of the study were contacted to participate in an interview in phase-two.
- ii. Prior to the remote interviews, the informed consent document was e-mailed to the participants who volunteered for an interview in phase-one and asked to consent to participate by returning a signed copy of the informed consent.
- iii. The participants were also asked to confirm verbally that they consented to be interviewed and had signed and dated the consent form prior to beginning the interviews.
- iv. The participants provided their consent to record the interviews, and all interview data recordings were kept in a password-protected computer within a secured location with locked access controls to warrant that the research participants' privacy and confidentiality were maintained.
- v. An attempt was made to remove from the transcripts any information that could readily identify the participants in the research reports. Where the participants' names were stated, these were replaced with a pseudonym.
- vi. Both phases of the study provided the participants with the relevant contact information of the UKZN ethics committees, the researcher, and the researcher's supervisor for queries about the study.

## **5.12. CHAPTER SUMMARY**

This chapter outlined the rationale for the mixed research methodology adopted in this study. The literature chapters have emphasised that understanding the phenomena of WEFs affecting FAs' PR is essential for developing effective HRM interventions to promote resilience within HEIs. Therefore, the methodological process by which this study's researcher sought to develop an increased understanding of the study phenomena needed to be carefully examined.

All three types of research approaches: quantitative research, qualitative research, and mixed methods research, have been discussed. As this chapter has revealed, each method of research has unique advantages and disadvantages. This chapter has argued that mixing quantitative and qualitative research approaches offered more insightful ways to understand the phenomena under study than either research approach alone. The rationale given was that using pragmatism as the research paradigm, as in the case of this study, could enable the researcher to draw on the strengths of both quantitative and qualitative approaches.

Specifically, the chapter has reviewed the research design adopted in the form of a mixed method sequential explanatory research design to undertake this study on WEFs affecting FAs' PR. The chapter provided an account of the two phases involved in this mixed methods study: phase-one and phase-two [i.e., the quantitative and qualitative phase], by detailing the research methods and instruments used to collect and analyse data in the different phases of the study. The objectives and feedback of the pilot study conducted prior to collecting data were outlined under the phase-one section, testing the reliability of the quantitative data collection instrument. As this study adopted a mixed methods sequential explanatory research design, issues regarding the integration of approaches were pertinent to the research process. Moreover, the literature shows that integration can occur at one or more phases of the research process in mixed methods studies. Therefore, the three ways in which this study has integrated the quantitative and qualitative approaches were presented. In the final section of the chapter, the primary ethical considerations taken to address ethical issues and carry out this study were described.

The next chapter presents and discusses the questionnaire survey findings of the first quantitative phase of the study, created using the QuestionPro online platform and posted on the UKZN notice system website.

## **CHAPTER SIX**

### **QUANTITATIVE PHASE DATA RESULTS**

#### **6.1. INTRODUCTION**

This chapter presents the results of the data collected in phase-one of the study relative to the quantitative research questions posed and reflected in the online questionnaire. To test the reliability of the measuring instrument, a pilot study with a sample of five [5] participants was conducted prior to phase-one, and relevant updates were made to the questionnaire. Following the data collection process, the services of an expert statistician were sought to analyse the quantitative data in more depth. Phase-one of this study was guided by the following research objectives.

##### **6.1.1. Five Quantitative Research Objectives [Phase-One]**

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.
- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

It should be noted that the fifth research objective was generated following the data analysis process of phase-two of the study, which revealed the participants' responses to phase-one of

the survey.<sup>13</sup> These were to some extent linked to their demographic characteristics and academic/employment profile [see: chapter seven].<sup>14</sup>

### **6.1.2. Two Qualitative Research Objectives [Phase-Two]**

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

To achieve these objectives, descriptive and inferential analysis of the quantitative data were carried out using the STATA statistical software package (Gillman, 2018). Descriptive statistics is a basic statistical procedure which intends to make the collected raw data easier to understand and involves classifying data in an objective and non-judgemental way, calculating summary statistics such as frequencies of occurrences, means and standard deviations, and using tables and graphs to present the summarised calculated data. Inferential statistics, on the other hand, concerns a more advanced statistical procedure used to test theorised relationships between variables of interest and draw inferences and conclusion from the population under study (Creswell, 2009; Creswell & Creswell, 2018; Denscombe, 2010; Kothari, 2004; Salkind, 2017; Sekaran & Bougie, 2013). In this regard, the results of the phase-one quantitative data analysis are presented in two separate sections: descriptive statistics and inferential statistics. The findings are presented considering the above phase-one objectives with an emphasis on the reported highest and/or lowest mean scores of the main variables contained therein. Where a few highest or lowest average scores were reported for an item or a variable of study, the

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<sup>13</sup> It is recognised that the findings from the data generated from the qualitative phase-two [chapter seven] of the study contributed to the interpretations of the quantitative phase-one findings. Interpretations of the findings of phase-one and phase-two are elaborated in chapter eight.

<sup>14</sup> Appendix J provides an example of the excel spreadsheet table used to record the frequency counts of data extracts, and determine the relationships between participants' demographics and the study's main variables/concepts.

relevant scores were presented as first highest/lowest score, second highest/lowest score and third highest/lowest score etc. Furthermore, where there were two or more items with scores of identical values, these scores have all been described in the chapter.

## **6.2. RESULTS OF FINDINGS: DESCRIPTIVE STATISTICS**

Descriptive statistics were used to analyse and report demographic information [Frequencies and Percentages] of the study sample; as well as analyse and provide a summary of the main variables/constructs of the study [Means and Standard Errors] pertaining to the respondents' perceptions on the extent to which WEFs affect their psychological resilience at UKZN. These findings are reported in Tables 6.1, 6.2, 6.3, 6.4 and 6.5.<sup>15</sup>

### **6.2.1. Description of the Study Sample [Demographic Variables] [Phase-One]**

A demographic questionnaire designed for this study was used to collect the following information: age, race, relationship status, number of children, highest level of academic qualification, years of work experience as academic in general, years of work experience as academic staff at the current university, current designation/rank, type of work contract, and college of work. Participants' characteristics and academic profile are shown in Table 6.1.<sup>16</sup>

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<sup>15</sup> The total number of responses reported/recorded [= N] varies for some of the demographics questions and/or some of the result tables because respondents skipped [either by accident or by choice] some of the survey items, questions, or sections.

<sup>16</sup> The demographic Section A of the survey also sought to collect data on the respondents' province of birth [if born South Africa] or country of birth [if not born in South Africa] and the UKZN Campus work location. These two demographics factors were not reported in the findings because no substantial evidence in terms of resilience was found in the analysis of these factors.

**Table 6.1. Demographic Factors and Academic Profile of Phase-One Respondents**

Variable	Frequency	Percentage	Cumulative Percentage
<b>Age</b>			
18-24	6	4.29	4.29
25-29	9	6.43	10.71
30-34	17	12.14	22.86
35-39	21	15.00	37.86
40-44	29	20.71	58.57
45-49	23	16.43	75.00
50+	35	25.00	100.00
Total	140	100.00	
<b>Race</b>			
Black	40	28.57	28.57
White	51	36.43	65.00
Indian	34	24.29	89.29
Coloured	9	6.43	95.71
Other	2	1.43	97.14
Prefer not to say	4	2.86	100.00
Total	140	100.00	
<b>Relationship Status</b>			
Single	39	28.06	28.06
Married/Partnered	86	61.87	89.93
Divorced/Separated	10	7.19	97.12
Widowed	1	0.72	97.84
Prefer not to say	3	2.16	100.00
Total	139	100.00	

Number of Children			
None	55	39.29	39.29
1	24	17.14	56.43
2	44	31.43	87.86
3	15	10.71	98.57
4	1	0.71	99.29
Prefer not to say	1	0.71	100.00
Total	140	100.00	
Highest Qualification			
Bachelor's Degree	3	2.17	2.17
Honours Degree	7	5.07	7.25
Master's Degree	40	28.99	36.23
Doctoral Degree	84	60.87	97.10
Other	4	2.90	100.00
Total	138	100.00	
How Long Academic in General			
2 years	9	6.77	6.77
2-4 years	19	14.29	21.05
5-9 years	23	17.29	38.35
10-14 years	30	22.56	60.90
15-19 years	35	26.32	87.22
20+ years	17	12.78	100.00
Total	133	100.00	
How Long Academic at UKZN			
1 year	6	4.51	4.51
1-4 years	34	25.56	30.08
5-9 years	30	22.56	52.63
10-14 years	26	19.55	72.18

15-19 years	27	20.30	92.48
20+ years	10	7.52	100.00
Total	133	100.00	
<hr/>			
Current Designation			
Lecturer	64	48.12	48.12
Senior Lecturer	18	13.53	61.65
Associate Professor	21	15.79	77.44
Full Professor	5	3.76	81.20
Other	25	18.80	100.00
Total	133	100.00	
<hr/>			
Contract Type			
Temporary contract	12	9.52	9.52
Fixed-term contract	13	10.32	19.84
Permanent contract	101	80.16	100.00
Total	126	100.00	
<hr/>			
College			
Humanities	33	25.58	25.58
Agriculture, Engineering and Science	29	22.48	48.06
Health Sciences	42	32.56	80.62
Law and Management Studies	25	19.38	100.00
Total	129	100.00	

Notes: Respondents who checked the option 'other' at the time of completing the survey indicated the following: Other Highest Qualification: Sub-specialist qualification: Colleges of Medicine of South Africa; NA; and PhD Candidate.

Out of the 162 potential participants who initiated the online survey, an average of 135 respondents completed the survey, which is a response rate/completion rate of 83%. The age of respondents ranged from 18 to 50 years and older, with 25% of respondents being 50 years and older, 20.71% between 40 to 44 years old, 16.43% between 45 to 49 years old, 15%

between 35 to 39 years old, 12.14% between 30 to 34 years old, 6.43% between 25 to 29 years old and 4.29% between 18 to 24 years old. Regarding the respondents' race self-identifications, 36.43% were White, 28.57% were Black, 24.29% were Indian, 6.43% were Coloured, and the remainder reported as "Other" and "Prefer not to say". Over 61% of the 139 respondents to the question of relationship status were married or partnered, 28.06% were single, 7.19% were divorced or separated, and the remainder reported being widowed or reported as "Prefer not to say". Of the 140 respondents that responded to the question of number of children, 39.29% reported having no children, 17.14% reported having 1 child and 43.56% reported having 2 or more children. Of the 138 respondents that responded to the question of highest level of academic qualification, the majority [60.87%] reported having a doctoral degree, followed by 28.99% having a master's degree, 5.07% having an honours degree, and the remainder 2.17% reported having a bachelor's degree, while 2.90% reported as "other". The respondents were asked to report on their years of work experience in academia, and their tenure as academic staff members at UKZN. The frequency of responses regarding the respondents' years of work experience as academics in general revealed that 61.65% of the 133 respondents reported working as academics for 10 to 20 years and over, whereas 38.35% of the respondents reported working as academics for 2 to 9 years. The frequency of responses regarding the respondents' years of employment at UKZN as academic staff revealed that 52.63% of the 133 respondents reported working at UKZN between 1 to 9 years, while 47.37% of the respondents reported working at UKZN for 10 to 20 years and over. In terms of the question of current designation, a majority [48.12%] of the 133 respondents were lecturers, followed by those represented as "other" [18.80%], associate professors [15.79%], senior lecturers [13.53%] and full professors [3.76%]. Of the 126 respondents that responded to the question of contract type, the first highest reported type of employment contract was permanent contract [80.16%], followed by fixed-term contract [10.32%], and temporary contract [9.52%]. Finally, the respondents were asked to report on their college of work affiliation at UKZN. Some 32.56% of the 129 respondents to this question reported being employed in the College of Health Sciences, 25.58% in the College of Humanities, 22.48% in the College of Agriculture, Engineering and Science, and 19.38% in the College of Law and Management Studies.

### 6.2.2. The Adapted Connor-Davidson Resilience Scale [CD-RISC] Profile of the Sample

According to the authors of the original CD-RISC scale, the 25 items can be combined to form five broad resilience factors: Factor 1 reflects the notion of personal competence, high standards, and tenacity [items 10, 11, 12, 16, 17, 23, 24, and 25]. Factor 2 corresponds to trust in one's instincts, tolerance of negative affect, and strengthening effects of stress [items 6, 7, 14, 15, 18, 19, and 20]. Factor 3 relates to the positive acceptance of change, and secure relationships [items 1, 2, 4, 5, and 8]. Factor 4 relates to control [items 13, 21, and 22]. Factor 5 denotes spiritual influences [items 3 and 9] (Connor & Davidson, 2003: 80). Subsequently, the results of the CD-RISC scale items are described broadly as per their resilience factor/category number.

Table 6.2 summarises the responses to the question as to what is the general perceived level of psychological resilience among female academics in the context of their workplace environment.<sup>17</sup> The survey's Section B which reflected this question consisted of 25 items from the original CD-RISC scale developed by Connor and Davidson (2003) and used in this study to assess FAs' perceptions of psychological resilience at UKZN. Each item was rated on a 5-point Likert-type scale ranging from "1 = not true at all" to "5 = true nearly all of the time" with higher scores indicating higher psychological resilience capacity and lower scores indicating lower psychological resilience capacity.

Figure 6.1 shows the CD-RISC 25 items grouped into the five factors as defined by Connor and Davidson (2003), and shaded by the researcher of this study for ease of presentation and interpretation of the results of the items presented in Table 6.2 and Table 6.6.

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<sup>17</sup> While recognising that the literature offers different definitions of the term resilience, for the purposes of this study and guiding respondents to provide most truthful responses to the survey items, the following definition [which has been included in the survey] was deemed to be an adequate and appropriate definition of resilience for academic workplace environment context. According to (Shrivastava & Desousa, 2016: 38), psychological resilience [or resilience] is "the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state".

Shaded in Yellow = Factor 1 [Items 10, 11, 12, 16, 17, 23, 24, and 25]
Shaded in Green = Factor 2 [Items 6, 7, 14, 15, 18, 19, and 20]
Shaded in Orange = Factor 3 [Items 1, 2, 4, 5, and 8]
Shaded in Purple = Factor 4 [Items 13, 21, and 22]
Shaded in Blue = Factor 5 [Items 3 and 9]

Figure 6.1. The CD-RISC 25 Items Five Factors

Source: Connor and Davidson (2003: 80)

Table 6.2. Means and Standard Errors for the Adapted Connor-Davidson Resilience Scale [CD-RISC] Statements [N=115]

Item number	Statements	Mean	Standard Error
1	I am able to adapt to changes occurring at UKZN	3,97	0,09
2	I have close and secure collegial relationships that offer emotional support at UKZN	3,13	0,11
3	I believe that sometimes fate or God can help in overcoming stressful events at UKZN	3,10	0,15
4	I can deal with whatever comes my way at UKZN	3,51	0,09
5	Past successes give me confidence to deal with new challenges at UKZN	3,78	0,09
6	I see the humorous side of things when I am faced with stressful events at UKZN	3,13	0,10
7	Having to cope with stressful events at UKZN can make me stronger	3,50	0,10
8	I tend to bounce back after illness, injury, or other hardships at UKZN	3,92	0,08
9	Positive or negative experiences, I believe that things happen for a reason	3,47	0,12
10	At UKZN I give my best effort no matter what the outcome may be	4,55	0,06
11	I believe I can achieve my goals at UKZN	3,51	0,11

12	When things look hopeless with my work-life at UKZN, I don't give up	4,16	0,08
13	I know where to turn for help during stressful times at UKZN	3,23	0,12
14	I stay focused and think clearly when under pressure at UKZN	3,57	0,09
15	I prefer to take the lead in problem solving at UKZN	3,51	0,10
16	I am not easily discouraged by failure at UKZN	3,40	0,10
17	I think of myself as a strong person when dealing with stressful events at UKZN	3,93	0,09
18	I can make unpopular or difficult decisions that affect other people, if it is necessary at UKZN	3,57	0,10
19	I can handle unpleasant or painful feelings such as sadness, fear and anger at UKZN	3,61	0,09
20	In dealing with adversities at UKZN, sometimes I have to act on a hunch without knowing why	3,24	0,08
21	I have a strong sense of purpose of work at UKZN	3,49	0,11
22	I feel in control of my work-life at UKZN	3,03	0,11
23	I like challenges at UKZN	3,04	0,10
24	I work to attain my goals no matter what stressful events occur at UKZN	4,02	0,08
25	I take pride in my achievements at UKZN	4,17	0,08

Notes: Given the aim of the study, regarding Table 6.2 items [CD-RISC items], only the items' lowest mean scores are described in text.

The respondents' averages on the Connor-Davidson Resilience Scale's factor 1 [personal competence, high standards, and tenacity] show that on average, respondents scored highest on item 10 [At UKZN I give my best effort no matter what the outcome may be] [M=4.55, SE=0.06] and lowest on item 23 [I like challenges at UKZN] [M=3.04, SE=0.10]. Respondents' averages on the CD-RISC's factor 2 [trust in one's instincts, tolerance of negative affect, and strengthening effects of stress] show that on average, respondents scored highest on item 19 [I can handle unpleasant or painful feelings such as sadness, fear, and anger at UKZN] [M=3.61, SE=0.09] and lowest on item 6 [I see the humorous side of things when I am faced with stressful events at UKZN] [M=3.13, SE=0.10]. Respondents' averages on the CD-RISC's factor 3 [positive acceptance of change, and secure relationships] show that on

average, respondents scored highest on item 1 [I am able to adapt to changes occurring at UKZN] [M=3.97, SE=0.09] and lowest on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] [M=3.13, SE=0.11]. Respondents' averages on the CD-RISC's factor 4 [control] show that on average, respondents scored highest on item 21 [I have a strong sense of purpose of work at UKZN] [M=3.49, SE=0.11] and lowest on item 22 [I feel in control of my work-life at UKZN] [M=3.03, SE=0.11]. Respondents' averages on the CD-RISC's factor 5 [spiritual influences] show that on average, respondents scored highest on item 9 [Positive or negative experiences, I believe that things happen for a reason] [M=3.47, SE=0.12] and lowest on item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] [M=3.10, SE=0.15].

### **6.2.3. The Workplace Environmental Factors [WEFs] Profile of the Sample**

Table 6.3 summarises the responses to the question as to what workplace environmental factors [WEFs] do female academics identify as the highest contributors of their experiences of negative mental health outcomes [NMHOs]. This question is reflected in Section C of the questionnaire and consisted of 8 WEFs identified in the literature review. Each WEF item was rated on a 5-point Likert-type scale ranging from "1 = To little or no extent" to "5 = To a great extent" [with higher scores indicating higher levels of NMHOs related to a specific WEF and lower scores indicating lower levels of NMHOs related to a specific WEF].

**Table 6.3. Means and Standard Errors for the Workplace Environmental Factors [WEFs] [N=112]**

<b>Variable</b>	<b>Mean</b>	<b>Standard Error</b>
Teaching demands	3,36	0,12
Research demands	3,79	0,10
Administrative demands & skewed workloads	3,87	0,11
Knowledge, skill, and ability [KSAs]	2,35	0,10
Professional & personal networking	2,68	0,11
Coaching support	2,60	0,12
Mentoring support	2,71	0,12
Compensation & rewards	3,05	0,13

Notes: Given the aim of the study, regarding Table 6.3 items [WEFs items], only the variables' highest mean scores are described in text.

Table 6.3 shows that the highest WEFs causing NMHOs among respondents were administrative demands & skewed workloads [M=3.87, SE=0.11], followed by research demands [M=3.79, SE=0.10], teaching demands [M=3.36, SE=0.12] and compensation & rewards [M=3.05, SE=0.13]. The lowest WEFs causing NMHOs among respondents were knowledge, skill, and ability [KSAs] [M=2.35, SE=0.10], coaching support [M=2.60, SE=0.12], professional & personal networking [M=2.68, 0.11] and mentoring support [M=2.71, SE=0.12].

#### **6.2.4. The Negative Mental Health Outcomes [NMHOs] Profile of the Sample**

Table 6.4 summarises the responses to the question as to what extent do female academics experience NMHOs<sup>18</sup> [stress, burnout, depression, anxiety, compassion fatigue] due WEFs.

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<sup>18</sup> It is recognised that definitions of these NMHOs' concepts abound in the literature of resilience. For the purposes of this study stress is a state of anxiety produced when events and responsibilities exceed one's coping abilities (Lazarus & Folkman, 1984). Burnout is "a state of complete emotional, physical and mental exhaustion" (Lunt et al., 2007: 102). Depression is a common psychological illness, characterised by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities

Subsection D1 of Section D of the questionnaire represented this question and consisted of 4 NMHOs underlined in the Model of Individual Workforce Resilience developed by Rees et al. (2015). Each NMHO item was rated on a 5-point Likert-type scale ranging from “1 = To little or no extent” to “5 = To a great extent” [with higher scores indicating higher levels of a NMHO construct in the workplace environment and lower scores indicating lower levels of a NMHO construct in the workplace environment].

**Table 6.4. Means and Standard Errors for the Negative Mental Health Outcomes [NMHOs] [N=112]**

<b>Variable</b>	<b>Mean</b>	<b>Standard Error</b>
Stress	3,71	0,11
Burnout	3,31	0,12
Depression	2,59	0,13
Anxiety	3,35	0,12
Compassion fatigue	3,03	0,11

Notes: Given the aim of the study, regarding Table 6.4 variables [NMHOs], only the variables’ highest mean scores are described in text.

Table 6.4 indicates that on average, respondents experienced relatively high levels of stress [M=3.71, SE=0.11], followed by moderately higher levels of anxiety [M=3.35, SE=0.12], burnout [M=3.31, SE=0.12], and slightly higher levels of compassion fatigue [M=3.03, SE=0.11] due to WEFs; but experienced moderately low levels of depression [M=2.59, SE=0.13] due to WEFs.

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(World Health Organisation, 2019a). Anxiety is a negative mood state that is accompanied by bodily symptoms such as increased heart rate, muscle tension, a sense of unease, and apprehension about the future (APA, 2013; Barlow, 2002). Compassion Fatigue is “occupational burnout that has been found to be particularly associated with caregiver stress and thought to occur as a result of providing ongoing empathy and compassion to others but neglect of one’s own self-care” (Rees et al., 2015).

### 6.2.5. The Building Blocks of Psychological Resilience [BBPRs] Profile of the Sample

Table 6.5 summarises the responses to the question as to what extent do female academics experience BBPRs<sup>19</sup> [neuroticism, mindfulness, self-efficacy, and coping] in the context of their workplace environment. This question is represented by Subsection D2 of Section D of the questionnaire and consisted of 5 BBPRs concepts contained in the model of individual workforce resilience developed by Rees et al. (2015). Each construct/item was rated on a 5-point Likert-type scale ranging from “1 = To little or no extent” to “5 = To a great extent” [with higher scores indicating higher levels of a BBPRs construct in the workplace environment and lower scores indicating lower levels of a BBPRs construct in the workplace environment].

**Table 6.5. Means and Standard Errors for the Building Blocks of Psychological Resilience [BBPRs] [N=112]**

Variable	Mean	Standard Error
Neuroticism	2,58	0,12
Mindfulness	3,34	0,10
Self-efficacy	3,84	0,09
Coping	3,72	0,10

Notes: Given the aim of the study, regarding Table 6.5 [BBPRs], [where applicable] only the highest mean scores for neuroticism are described in text while only the lowest mean scores for mindfulness, self-efficacy and coping variables are described in text.

Table 6.5 reveals that on average, respondents had relatively high levels of self-efficacy [M=3.84, SE=0.09], followed by high levels of coping [M=3.72, SE=0.10], mindfulness

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<sup>19</sup> Several key factors [building blocks] that comprise a resilience model are evident in the broader literature of resilience. For the purposes of this study, neuroticism: is a “tendency to experience enduring negative emotional states such as anxiety, guilt, anger and depression more frequently, intensely, and readily, and for a more enduring period of time” (Rees et al., 2015). Mindfulness: is the “ability to attend to intentionally and maintain non-judgmental awareness of one’s experience [thoughts, feelings, physical sensations] in the present moment” (Reich et al., 2010: 472). Self-efficacy: is an individual’s belief in his/her own ability to perform a selected task (Bandura, 1977). Coping: is “a process of adjustment following an adverse event” (Rees et al., 2015).

[M=3.34, SE=0.10] and low levels of neuroticism [M=2.58, SE=0.12] at the UKZN workplace environment.

### **6.3. RESULTS OF FINDINGS: INFERENTIAL STATISTICS**

After conducting phase-two of the study, it was interesting to discover that the majority of the interviewed participants in phase-two related several of their phase-one survey responses to their demographic and employment backgrounds. This raised a new question as to what possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, WEFs, NMHOs and BBPRs. This has led to further correlation analysis undertaken to investigate the relationships between the reported mean scores on the main variables [CR-RISC, WEFs, NMHOs, and BBPRs] and the demographic variables of respondents. These findings were presented in Tables 6.6, 6.7, 6.8, and 6.9.<sup>20</sup>

#### **6.3.1. The Relationship Between Demographics and Psychological Resilience**

Table 6.6 shows the mean scores of respondents perceived levels of resilience by various demographic characteristics based on the Connor-Davidson Resilience Scale [CD-RISC]. The lowest-scored items reported are described in connection to their respective resilience factors [i.e., factor 1, 2, 3 4, and 5] [i.e., resilience classifications] (Connor & Davidson, 2003), to aid presenting the CR-RISC items results.

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<sup>20</sup> General notes applied to Tables 6.6, 6.7, 6.8, and 6.9: Temporary = Less than six months' contract; Fixed-term = At least six months' contract; Permanent = No end date contract; CAES = College of Agriculture, Engineering and Science; CLMS = College of Law and Management Studies.

**Table 6.6. Means for the Relationship Between Demographics and the Adapted Connor-Davidson Resilience Scale [CD-RISC] [N=115]**

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20	Item 21	Item 22	Item 23	Item 24	Item 25
<b>Age</b>																									
18-24	3,75	2,25	4,00	3,50	4,00	3,25	3,75	4,25	4,30	4,50	4,50	4,25	2,75	3,75	3,50	3,50	4,25	3,75	4,00	4,00	3,00	3,00	2,75	4,50	4,75
25-29	3,33	2,67	4,67	3,33	3,33	3,00	3,33	3,33	3,67	4,67	3,33	4,00	3,00	3,67	3,67	2,67	3,33	3,67	3,33	3,67	3,33	2,67	3,33	4,33	4,67
30-34	4,10	3,10	3,00	3,40	3,60	2,80	3,70	3,60	3,70	4,30	3,80	3,90	3,20	3,30	3,10	3,10	3,40	3,30	3,20	3,10	3,50	3,30	3,30	3,80	4,00
35-39	3,75	2,95	3,00	3,25	3,85	3,15	3,05	3,35	3,35	4,30	3,50	3,85	3,05	3,10	3,20	3,40	3,85	2,95	3,35	3,30	3,30	2,95	2,85	3,75	3,90
40-44	3,96	3,33	2,96	3,41	3,74	3,30	3,56	4,04	3,41	4,48	3,48	4,07	3,30	3,70	3,85	3,52	4,11	3,93	3,70	3,19	3,67	3,00	3,04	4,19	4,30
45-49	4,15	3,45	3,35	3,85	3,95	3,15	3,70	4,00	3,80	4,45	3,40	4,20	3,25	3,45	3,40	3,30	3,85	3,70	3,55	3,05	3,45	3,00	3,25	3,75	4,00
50+	4,06	3,09	2,97	3,63	3,75	3,03	3,53	4,22	3,16	4,91	3,44	4,50	3,41	3,91	3,63	3,53	4,09	3,66	3,84	3,28	3,59	3,06	2,97	4,22	4,28
<b>Race</b>																									
Black	3,82	2,75	3,79	3,25	4,00	2,86	3,54	4,04	3,93	4,43	3,89	4,32	3,25	3,29	3,43	3,57	3,96	3,50	3,82	3,32	3,71	3,07	3,00	4,00	4,18
White	3,91	3,35	2,43	3,54	3,54	3,20	3,37	3,80	2,89	4,63	3,15	4,15	3,13	3,78	3,70	3,22	4,00	3,63	3,57	3,02	3,33	2,80	3,11	4,07	4,02
Indian	4,20	3,07	3,30	3,77	3,93	3,27	3,63	3,90	3,93	4,57	3,67	4,07	3,43	3,60	3,33	3,57	3,87	3,60	3,57	3,40	3,60	3,50	3,03	4,07	4,37
Coloured	4,29	4,00	3,86	3,57	4,00	3,00	3,86	4,43	3,57	4,71	4,00	4,29	3,71	3,86	4,00	3,43	4,29	3,86	3,86	3,43	3,86	2,71	3,14	4,29	4,43
Other	5,00	4,00	5,00	5,00	5,00	4,00	5,00	5,00	5,00	5,00	5,00	5,00	4,00	5,00	5,00	4,00	5,00	4,00	4,00	5,00	5,00	5,00	5,00	5,00	5,00
Prefer not to say	3,25	2,50	1,75	2,75	3,25	3,00	2,75	3,25	2,75	4,00	2,75	3,50	2,00	2,25	2,25	3,00	2,75	2,75	2,50	3,25	2,25	1,75	2,00	2,75	3,75
<b>Relationship Status</b>																									
Single	4,00	2,92	3,77	3,50	3,81	3,04	3,65	3,73	3,88	4,54	3,77	4,15	3,38	3,58	3,65	3,35	3,81	3,42	3,54	3,54	3,54	3,08	3,15	4,08	4,54
Married/ Partnered	3,93	3,34	2,99	3,49	3,71	3,16	3,46	3,92	3,37	4,59	3,45	4,17	3,32	3,58	3,54	3,39	3,96	3,62	3,53	3,13	3,50	3,00	3,07	4,05	4,07
Divorced/ Separated	4,00	2,67	2,67	3,67	4,00	3,22	3,78	4,33	3,22	4,33	3,33	4,11	2,56	3,67	3,22	3,44	4,00	3,67	4,22	3,44	3,56	3,00	2,78	3,78	4,22
Widowed	5,00	3,00	3,00	5,00	5,00	4,00	5,00	5,00	5,00	5,00	4,00	5,00	3,00	4,00	4,00	4,00	4,00	4,00	5,00	4,00	3,00	3,00	3,00	5,00	5,00
Prefer not to say	4,33	1,67	3,00	3,33	4,00	2,33	2,67	4,00	3,67	4,33	3,33	4,00	2,33	3,33	2,67	3,67	4,33	3,33	4,00	2,67	3,33	3,33	2,33	3,33	3,33
<b>Number of Children</b>																									
0	3,93	3,05	3,22	3,49	3,76	3,02	3,63	3,76	3,88	4,51	3,63	4,07	3,27	3,61	3,49	3,41	3,80	3,41	3,49	3,49	3,44	2,98	3,07	4,07	4,32
1	3,95	3,00	2,67	3,33	3,90	3,10	3,05	3,76	2,90	4,33	3,29	4,05	2,90	3,19	3,33	3,19	3,81	3,48	3,48	3,24	3,43	2,81	3,14	3,43	3,90
2	4,13	3,38	3,28	3,74	3,82	3,33	3,64	4,18	3,36	4,77	3,59	4,38	3,44	3,82	3,72	3,51	4,08	3,77	3,85	3,08	3,56	3,18	3,15	4,23	4,18
3	3,69	3,08	3,08	3,23	3,62	2,85	3,38	3,92	3,31	4,46	3,38	4,08	3,08	3,46	3,38	3,38	4,15	3,54	3,54	3,00	3,62	3,08	2,46	4,31	4,15
4	4,00	3,00	4,00	4,00	3,00	3,00	4,00	3,00	4,00	4,00	3,00	4,00	3,00	3,00	4,00	4,00	4,00	5,00	3,00	3,00	4,00	3,00	4,00	4,00	5,00
Prefer not to say	4,00	2,00	2,00	3,00	4,00	3,00	3,00	4,00	5,00	4,00	3,00	3,00	4,00	3,00	2,00	3,00	4,00	4,00	4,00	3,00	3,00	3,00	2,00	3,00	3,00

**Table 6.6. Means for the Relationship Between Demographics and the Adapted Connor-Davidson Resilience Scale [CD-RISC] [N=115] [Continued]**

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20	Item 21	Item 22	Item 23	Item 24	Item 25
<b>Highest Qualification</b>																									
Bachelor's Degree	2,00	1,00	3,00	2,00	3,00	2,00	3,00	3,00	4,00	4,00	2,00	3,00	3,00	4,00	4,00	2,00	4,00	4,00	3,00	2,00	3,00	1,00	3,00	2,00	5,00
Honours Degree	4,67	2,67	4,00	3,67	4,00	3,33	4,33	4,00	4,33	4,33	4,33	4,00	2,67	4,00	3,67	3,67	4,33	4,00	4,00	4,00	3,33	3,33	3,00	4,33	4,67
Master's Degree	3,91	3,03	3,42	3,42	3,82	3,03	3,48	3,88	3,63	4,48	3,67	4,18	3,33	3,36	3,48	3,42	3,88	3,45	3,52	3,33	3,76	3,00	3,15	3,97	4,18
Doctoral Degree	4,05	3,29	2,97	3,57	3,80	3,17	3,49	3,95	3,36	4,61	3,45	4,21	3,27	3,68	3,53	3,41	3,96	3,64	3,65	3,19	3,43	3,07	3,03	4,08	4,15
Other	3,00	2,25	2,75	3,50	3,25	3,00	3,25	3,75	3,50	4,25	3,25	3,50	2,50	3,00	3,25	3,25	3,75	3,00	3,50	3,25	3,00	2,75	2,50	3,75	4,00
<b>How Long Academic in General</b>																									
Less than 2 years	3,67	3,50	4,67	3,50	4,00	3,00	3,83	4,17	4,00	4,33	3,83	4,50	4,00	3,50	3,67	3,50	3,83	3,50	3,67	3,17	3,67	3,33	3,33	3,83	4,00
2-4 years	4,07	3,07	4,20	3,53	4,07	3,40	3,73	4,20	4,00	4,67	4,27	4,40	3,60	4,07	3,93	3,60	4,40	3,27	3,87	3,67	3,93	3,67	3,00	4,47	4,53
5-9 years	3,80	2,90	2,85	3,10	3,45	2,95	3,15	3,35	3,05	4,30	3,30	3,90	2,55	3,05	3,20	3,15	3,55	3,55	3,45	3,20	3,05	2,50	3,00	3,80	3,90
10-14 years	4,03	3,17	3,14	3,72	3,83	3,14	3,48	3,97	3,46	4,55	3,45	4,00	3,17	3,66	3,52	3,38	4,10	3,66	3,86	3,14	3,72	3,10	2,97	4,07	4,34
15-19 years	3,94	3,32	2,81	3,65	3,87	3,19	3,55	3,87	3,38	4,58	3,29	4,19	3,32	3,45	3,48	3,39	3,84	3,68	3,42	3,26	3,39	2,90	3,23	3,94	4,04
20+ years	4,20	3,00	2,40	3,40	3,60	2,93	3,53	4,27	3,07	4,80	3,53	4,40	3,47	3,93	3,53	3,60	3,93	3,60	3,47	3,07	3,40	3,07	2,80	4,07	4,20
<b>How Long Academic at UKZN</b>																									
Less than 1 year	4,00	3,75	3,00	4,00	4,25	3,25	4,50	4,75	3,00	4,75	4,50	4,75	4,50	3,75	4,00	4,25	4,50	3,75	4,00	3,50	4,50	4,00	3,50	4,25	4,50
1-4 years	3,89	2,96	3,33	3,33	3,85	3,07	3,41	3,93	3,44	4,41	3,74	4,07	3,15	3,67	3,59	3,19	3,85	3,22	3,52	3,26	3,44	3,22	3,00	4,15	4,19
5-9 years	3,88	3,00	3,50	3,35	3,77	3,08	3,46	3,62	3,58	4,31	3,50	4,08	2,96	3,23	3,19	3,31	3,88	3,73	3,81	3,31	3,46	2,65	3,04	3,81	4,12
10-14 years	3,92	3,16	2,80	3,68	3,72	3,20	3,44	4,00	3,42	4,64	3,32	4,00	3,12	3,60	3,52	3,44	4,04	3,60	3,60	3,28	3,52	3,04	3,08	4,16	4,04
15-19 years	4,16	3,24	2,76	3,64	3,96	3,16	3,56	3,96	3,40	4,76	3,52	4,32	3,32	3,68	3,72	3,72	4,04	3,80	3,56	3,28	3,56	3,12	3,12	3,96	4,32
20+ years	4,11	3,56	2,44	3,56	3,11	3,00	3,44	4,00	2,89	4,78	3,00	4,44	3,89	3,89	3,44	3,00	3,56	3,44	3,33	2,67	3,11	2,78	2,67	4,00	4,11
<b>Current Designation</b>																									
Lecturer	4,00	3,00	3,36	3,63	3,81	3,17	3,56	3,92	3,30	4,49	3,39	4,17	3,20	3,61	3,46	3,29	3,95	3,56	3,69	3,25	3,34	2,88	3,08	3,90	4,12
Senior Lecturer	4,00	3,79	2,36	3,29	3,36	3,21	3,21	3,86	3,29	4,57	3,14	4,07	3,36	3,36	3,43	3,29	3,79	3,64	3,43	2,93	3,07	2,79	2,93	4,14	3,71
Associate Professor	4,14	3,24	2,76	3,76	4,14	3,14	3,76	4,10	3,24	4,86	3,95	4,33	3,52	4,05	3,67	3,90	4,24	3,95	3,76	3,14	3,90	3,76	3,10	4,29	4,57
Full Professor	3,75	2,75	2,75	2,75	4,00	2,75	3,50	4,00	3,75	4,75	3,75	4,25	2,75	4,25	4,50	3,75	4,50	4,25	3,75	3,50	4,00	3,25	3,50	4,50	4,75
Other	3,72	3,11	3,44	3,22	3,56	2,94	3,22	3,72	3,72	4,33	3,67	4,00	3,06	2,94	3,39	3,22	3,56	3,00	3,28	3,50	3,11	2,78	2,83	3,94	4,11
<b>Contract Type</b>																									
Temporary	3,67	2,78	2,89	3,00	3,11	2,89	3,33	3,44	3,22	4,33	3,44	3,89	2,56	3,11	3,33	3,33	3,44	3,56	3,11	3,44	2,89	2,78	2,89	3,78	3,89
Fixed-term	3,82	3,64	4,00	3,45	3,55	2,82	3,36	3,73	3,73	4,64	3,27	3,82	3,18	2,91	3,45	3,09	3,55	2,82	2,91	3,36	3,27	2,73	3,00	4,00	4,18
Permanent	4,09	3,16	3,03	3,60	3,88	3,20	3,58	3,98	3,43	4,57	3,54	4,24	3,30	3,68	3,53	3,47	4,03	3,71	3,75	3,20	3,60	3,12	3,11	4,04	4,18
<b>College</b>																									
Humanities	3,83	2,93	2,72	3,31	3,48	2,83	3,21	3,76	3,24	4,31	3,28	3,97	2,90	3,21	3,38	3,14	3,62	3,41	3,52	3,10	3,31	2,69	2,76	3,79	3,93
CAES	3,88	3,12	2,73	3,31	3,42	2,92	3,15	3,81	3,04	4,54	3,15	4,00	3,15	3,50	3,42	2,96	3,73	3,46	3,42	3,31	2,96	2,62	2,88	4,12	3,92
Health Sciences	4,03	3,18	3,74	3,67	4,08	3,36	3,79	4,03	3,87	4,64	3,64	4,23	3,54	3,72	3,54	3,59	4,13	3,62	3,59	3,28	3,82	3,38	3,28	4,05	4,38
CLMS	4,33	3,52	2,95	3,81	4,10	3,33	3,86	4,00	3,50	4,71	4,00	4,48	3,29	3,95	3,81	4,00	4,29	3,90	4,00	3,24	3,90	3,38	3,24	4,14	4,38

Notes: Given the aim of the study, regarding Table 6.6 items [CD-RISC items], only the items' lowest mean scores are described in text; To avoid exacerbating the size of the table, only mean scores of the CD-RISC items are illustrated in Table 6.6; For full statement description of the CD-RISC items, see Table 6.2.

### 6.3.1.1. CD-RISC Items and Age

Table 6.6 indicates that, on the factor 1, respondents aged between 18–24, 25–29, 35–39 and 50 years and older reported lower mean scores [2.75; 2.67; 2.85; 2.97] than respondents aged 40–44 [3.52 and 3.30] and 45-49 [3.04 and 3.25] on item 16 [I am not easily discouraged by failure at UKZN] and item 23 [I like challenges at UKZN]. On the factor 2, respondents aged 30-34 and 35-39 scored lower [M=2.80 and M=2.95] than respondents aged 40–44 [M=3.30 and 3.30] on items 6 [I see the humorous side of things when I am faced with stressful events at UKZN] and item 18 [I can make unpopular or difficult decisions that affect other people, if it is necessary at UKZN]. On the factor 3, respondents aged 18–24, 25–29 and 35–39 scored

lower [2.25; 2.67; and 2.95, respectively] than all other groups on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN]. On the factor 4, young respondents in the 18-24- and 25–29-year-old-age groups reported lower mean scores [2.75; 2.67 respectively] than the older age groups on items 13 [I know where to turn for help during stressful times at UKZN] and item 22 [I feel in control of my work-life at UKZN]. On the factor 5, only respondents aged 40–44 reported a slightly lower score of 2.96 for item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] compared to all other age groups' respondents.

#### 6.3.1.2. CD-RISC Items and Race

On the factor 1, there was no lower scores reported among respondents from all race groups. On the factor 2, among all race groups, the lowest score [M=2.86] were reported by Black respondents reported than race respondents on item 6 [I see the humorous side of things when I am faced with stressful events at UKZN]. On the factor 3, Black respondents scored lowest [M=2.75] than all other race groups on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN]. On the factor 4, White and Coloured respondents reported lower mean scores [2.80; 2.71 respectively] than the other race groups on item 22 [I feel in control of my work-life at UKZN]. On the factor 5, White respondents recorded the lowest mean scores of 2.43 and 2.89 for both item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] and item 9 [Positive or negative experiences, I believe that things happen for a reason] compared to all other race groups' respondents.

#### 6.3.1.3. CD-RISC Items and Relationship Status

On the factor 1, among the respondents, the divorced or separated respondents was lowest on item 23 [I like challenges at UKZN] [M=2.78] than were the single, the married or partnered, and the widowed respondents. None of the respondents reported lower average scores on factor 2 items based on their relationship status, suggesting that respondents' self-assessment of factor 2 items [trust in one's instincts, tolerance of negative affect, and strengthening effects of stress] were, in relation to their 'relationship status', higher as opposed to lower. On the factor 3, the single and the divorced or separated respondents had the lowest mean scores [2.92 and 2.67] on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] compared to the married or partnered and the widowed respondents. On the factor 4, there was

a relatively lower mean score among the divorced or separated 2.56 on item 13 [I know where to turn for help during stressful times at UKZN], with all other respondents reporting higher scores. On the factor 5, the married or partnered respondents and the divorced or separated respondents had lower mean scores [2.99 and 2.67] relative to the single and the widowed respondents on item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN].

#### 6.3.1.4. CD-RISC Items and Number of Children

The lowest mean score recorded on factor 1 items was item 23 [I like challenges at UKZN] reported f [2.00]. The lowest mean scores for factor 2 items were item 6 [I see the humorous side of things when I am faced with stressful events at UKZN] for respondents with 3 children [2.85] and item 15 [I prefer to take the lead in problem solving at UKZN] for the respondent who selected the “prefer not to say” option [2.00]. The lowest mean score for factor 3, reported by the respondent who selected the “prefer not to say” option was 2.00 on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN]. The lowest scores for factor 4 were recorded for those with 1 child on item 13 [I know where to turn for help during stressful times at UKZN] and item 22 [I feel in control of my work-life at UKZN] [2.90 and 2.81]. The lowest scores on factor 5 items were reported by respondents with 1 child [2.00] for item 9 [Positive or negative experiences, I believe that things happen for a reason] and by the respondent who selected the “prefer not to say” option [2.00] for item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN].

#### 6.3.1.5. CD-RISC Items and Highest Qualification

On the factor 1, respondents with a bachelor’s degree reported a lowest score of  $M=2.00$  on items 11, 16 and 24 [factor 1] as well as items 6 and 20 [factor 2] than respondents with higher degrees. Respondents with a bachelor’s degree had the lowest scores [ $M=2.00$ ; 1.00 and 2.00] on items 1, 2 and 4 respectively, followed by respondents with an honour’s degree [ $M=2.67$ ] on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] [factor 3]. On the factor 4, respondents with a bachelor’s degree scored a substantial lower score [ $M=1.00$ ] for item 22 [I feel in control of my work-life at UKZN], while respondents with an honour’s degree reported a lower score of 2.67 for item 13 [I know where to turn for help during stressful times at UKZN]. In the case of factor 5, only respondents with a doctoral

degree reported a relatively lower mean score [2.97] for item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN].

#### 6.3.1.6. CD-RISC Items and Years of Experience in Academia

Respondents with 10–14 years of experience and more than 20 years of experience in academia scored lowest [2.80; 2.97 respectively] on item 23 [I like challenges at UKZN] [factor 1]. Respondents with 5–9 years of experience and those with more than 20 years of experience in academia scored lowest [2.95; 2.93 respectively] on item 6 [I see the humorous side of things when I am faced with stressful events at UKZN] [factor 2]. Respondents who had been in academia for 5–9 years scored lowest [2.90] on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] [factor 3]. On factor 4, item 13 [I know where to turn for help during stressful times at UKZN], only respondents who had been in academia for 5–9 years reported a lowest score [2.55], on item 22 [I feel in control of my work-life at UKZN] of the same factor 4, respondents who had been in academia for 5–9 years and those with 15–19 years of experience in academia reported the lowest scores [2.50 and 2.90 respectively]. Respondents with 5–9 years, 15–19 years, and those with more than 20 years of experience as academics had the lowest scores [2.85; 2.81; 2.40 respectively] on item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] [factor 5].

#### 6.3.1.7. CD-RISC Items and Years of Employment at UKZN

Respondents who worked at UKZN 20 years and over scored the lowest [2.67] on item 23 [I like challenges at UKZN] [factor 1]. Respondents who worked at UKZN for 1-4 years had the lowest scores [2.96] on item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] [factor 3]. Respondents who worked at UKZN for 5–9 years scored lowest [2.96] on item 13 [I know where to turn for help during stressful times at UKZN] [factor 4]. Respondents who worked at UKZN for 5–9 years also scored lowest [2.96; 2.65] on item 13 [I know where to turn for help during stressful times at UKZN] and on item 22 [I feel in control of my work-life at UKZN] respectively, and respondents who worked 20 years and over had the lowest score [2.78] on item 22 [I feel in control of my work-life at UKZN] [factor 4]. Respondents who worked at UKZN for 10–14 years, 15–19 years and 20 years and over had the lowest scores [2.80; 2.76; 2.44 respectively] on item 3 [I believe that sometimes

fate or God can help in overcoming stressful events at UKZN], and those with more than 20 years of experienced at UKZN had a lowest score of 2.89 on item 9 [Positive or negative experiences, I believe that things happen for a reason] [factor 5].

#### 6.3.1.8. CD-RISC Items and Current Designation

In terms of academic ranks related to factor 1, only senior lecturer respondents reported a slight low score [M=2.93] for item 23 [I like challenges at UKZN]. In terms of factor 2, senior lecturer respondents had a low mean score of 2.93 for item 20 [In dealing with adversities at UKZN, sometimes I have to act on a hunch without knowing why] and full professor respondents had the lowest mean score of 2.75 for item 6 [I see the humorous side of things when I am faced with stressful events at UKZN] among other all academic ranks. Only full professor respondents reported a lower mean score of 2.75 for item 2 [I have close and secure collegial relationships that offer emotional support at UKZN] [factor 3]. For factor 4, lecturer and senior lecturer had the lowest scores [M=2.88 and M=2.79 respectively] on item 22 [I feel in control of my work-life at UKZN], followed by full professor respondents [M=2.75] on item 13 [I know where to turn for help during stressful times at UKZN]. On factor 5 [item 3: I believe that sometimes fate or God can help in overcoming stressful events at UKZN] senior lecturer respondents had the lowest mean scores, followed by full professor respondents and associate professor respondents [M=2.36, M=2.75, M=2.76 respectively].

#### 6.3.1.9. CD-RISC Items and Contract Type

Only temporary contract respondents reported a lower score of 2,89 on item 23 [I like challenges at UKZN] [factor 1]. With regard to factor 2, temporary and fixed-term contract respondents reported the lowest scores [M=2.89 and M=2.82 respectively] on item 6 [I see the humorous side of things when I am faced with stressful events at UKZN]; only temporary contract respondents reported a lower score of 2.91 on item 14 [I stay focused and think clearly when under pressure at UKZN]; and fixed-term contract respondents scored on average M= 2.82 and M=2.91 for items 18 and 19 respectively. On item 2 of factor 3 [I have close and secure collegial relationships that offer emotional support at UKZN], only temporary contract respondents reported a lower score [M=2.78]. On items 13 and 21 of factor 4, only temporary contract respondents reported a lower score of 2.56 and 2.89 respectively; and on item 22 [I feel in control of my work-life at UKZN] both temporary and fixed-term contract respondents

reported lower scores  $M= 2.78$  and  $M=2.73$  respectively. For factor 5, only respondents on a temporary contract reported a lower mean score [2,78] related to item 2 [I have close and secure collegial relationships that offer emotional support at UKZN].

#### 6.3.1.10. CD-RISC Items and College

On factor 1, the average mean score for the CAES respondents was 2.96 for item 16 [I am not easily discouraged by failure at UKZN]; and the College of Humanities respondents and CAES respondents were 2.76, 2.88 for item 23 [I like challenges at UKZN]. The mean score for the Humanities respondents and the CAES respondents were 2.83 and 2.92 respectively for item 6 [I see the humorous side of things when I am faced with stressful events at UKZN] [factor 2]. On factor 3, only the Humanities respondents reported a mean score of 2.93 for item 2 [I have close and secure collegial relationships that offer emotional support at UKZN]. On factor 4, the Humanities respondents reported a mean score of 2.90 for item 13 [I know where to turn for help during stressful times at UKZN], followed by respondents from the CAES with a mean score of 2.96 for item 21 [I have a strong sense of purpose of work at UKZN], which followed by respondents from the Humanities and the CAES with a score of  $M=2.69$  and  $M=2.62$  for item 22 [I feel in control of my work-life at UKZN]. Respondents from the Humanities, the CAES and the CLMS reported a score of 2.72, 2.73, and 2.95, respectively for item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN].

Interestingly, none of the respondents from the College of Health Sciences reported lower mean scores for items relating to the CD-RISC. The above indicates that, apart from the slight lower score of 2.95 for the CLMS respondents on item 3 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] of factor 5, respondents from the CLMS and Health Sciences reported higher mean scores in the relationships between resilience and college of employment.

#### **6.3.2. The Relationship Between Demographics and Workplace Environmental Factors [WEFs]**

Table 6.7 shows the mean scores for the Workplace Environmental Factors scales across different demographic variables.

**Table 6.7. Means for the Relationship Between Demographics and Workplace Environmental Factors [WEFs] [N=112]**

	Teaching demands	Research demands	Administrative demands & skewed workloads	Knowledge, skill, and ability [KSAS]	Professional & personal networking	Coaching support	Mentoring support	Compensation & rewards
<b>Age</b>								
18-24	4,25	4,75	4,00	4,00	4,00	3,75	4,25	3,50
25-29	4,00	3,33	4,33	2,67	4,00	3,67	3,00	3,33
30-34	2,80	3,70	3,10	2,30	2,00	2,20	2,60	2,80
35-39	3,06	4,00	3,76	2,24	2,53	2,82	3,06	3,06
40-44	3,54	3,54	3,58	2,23	2,65	2,42	2,69	2,85
45-49	3,05	3,70	4,00	2,35	2,50	2,70	2,50	3,55
50+	3,56	3,91	4,25	2,28	2,81	2,44	2,47	2,91
<b>Race</b>								
Black	3,57	4,14	3,57	2,82	3,36	3,21	2,96	3,82
White	3,27	3,73	4,16	2,02	2,45	2,32	2,59	2,82
Indian	3,14	3,55	3,62	2,38	2,45	2,55	2,66	2,83
Coloured	3,29	3,57	4,29	2,43	2,71	2,43	2,71	2,86
Other	4,00	5,00	1,00	1,00	2,00	1,00	3,00	4,00
Prefer not to say	4,67	4,00	4,67	2,67	2,00	2,33	2,33	1,67
<b>Relationship Status</b>								
Single	3,36	3,96	3,68	2,44	2,88	2,96	3,20	3,28
Married/ Partnered	3,47	3,79	3,90	2,29	2,60	2,45	2,56	2,92
Divorced/ Separated	2,89	3,56	4,22	2,56	2,89	2,78	2,67	3,89
Widowed	3,00	3,00	5,00	2,00	3,00	3,00	3,00	5,00
Prefer not to say	2,33	3,67	3,00	2,67	2,33	2,67	2,33	1,67
<b>Number of Children</b>								
0	3,39	3,74	4,05	2,21	2,61	2,68	2,87	3,24
1	3,30	3,80	3,70	2,55	2,70	2,65	2,55	2,95
2	3,28	3,77	3,77	2,23	2,62	2,28	2,54	2,92
3	3,62	4,08	3,92	2,69	3,00	3,00	2,77	3,00
4	3,00	3,00	3,00	3,00	4,00	5,00	5,00	5,00
Prefer not to say	3,00	4,00	4,00	3,00	2,00	3,00	3,00	2,00
<b>Highest Qualification</b>								
Bachelor's Degree	5,00	3,00	5,00	2,00	2,00	2,00	2,00	3,00
Honours Degree	4,00	4,67	3,67	4,00	3,67	3,33	4,33	3,67
Master's Degree	3,47	3,83	3,77	2,50	2,87	2,93	2,90	3,30
Doctoral Degree	3,24	3,72	3,86	2,18	2,53	2,36	2,53	2,92
Other	3,75	4,50	4,50	3,25	3,50	4,00	3,50	3,25

Notes: Given the aim of the study, regarding Table 6.7 items [WEFs items], only the variables' highest mean scores are described in text.

**Table 6.7. Means for the Relationship Between Demographics and Workplace Environmental Factors [WEFs] [N=112] [Continued]**

<b>How Long Academic in General</b>								
Less than 2 years	3,50	4,00	2,83	3,00	3,33	3,50	3,50	3,17
2-4 years	3,40	3,93	3,33	2,67	3,13	3,20	3,33	3,00
5-9 years	3,58	3,89	3,95	2,68	2,58	2,32	2,53	3,05
10-14 years	3,18	3,75	4,00	2,14	2,57	2,39	2,71	2,89
15-19 years	3,28	3,69	3,97	2,28	2,66	2,79	2,72	3,31
20+ years	3,47	3,73	4,27	1,87	2,33	2,00	1,93	2,87
<b>How Long Academic at UKZN</b>								
Less than 1 year	3,50	4,00	3,00	3,25	3,75	4,25	4,25	3,50
1-4 years	3,12	3,85	3,27	2,58	2,92	2,81	2,92	2,81
5-9 years	3,67	3,96	4,13	2,50	2,75	2,29	2,46	3,21
10-14 years	3,25	3,75	4,00	2,13	2,46	3,00	3,04	3,29
15-19 years	3,20	3,60	3,96	2,24	2,64	2,32	2,44	3,12
20+ years	3,89	3,78	4,67	1,78	2,00	1,78	1,89	2,33
<b>Current Designation</b>								
Lecturer	3,71	3,93	4,03	2,62	2,93	2,83	2,90	3,34
Senior Lecturer	3,36	3,43	3,64	1,86	1,79	2,07	2,36	2,57
Associate Professor	2,65	3,40	4,05	1,60	2,40	2,20	2,25	2,55
Full Professor	3,00	3,25	3,50	2,00	2,50	1,50	1,75	3,25
Other	3,06	4,25	3,31	2,81	2,94	3,00	3,13	3,00
<b>Contract Type</b>								
Temporary	3,25	4,13	3,63	3,38	3,00	2,75	3,13	3,00
Fixed-term	3,50	4,10	3,40	2,40	3,10	3,40	3,40	3,70
Permanent	3,34	3,71	3,90	2,25	2,57	2,47	2,58	2,98
<b>College</b>								
Humanities	3,61	3,86	4,11	2,50	2,86	2,89	2,86	3,39
CAES	3,15	3,69	3,58	2,12	2,27	2,15	2,35	2,85
Health Sciences	3,16	3,49	3,86	2,27	2,65	2,57	2,70	2,81
CLMS	3,55	4,35	3,85	2,50	2,90	2,70	2,90	3,30

Notes: Given the aim of the study, with regards to Table 6.7 items [WEFs items], only the variables' highest mean scores are described in text.

### 6.3.2.1. WEFs and Age

The results in Table 6.7 show that among all age groups, respondents aged 18–24 and 25–29 experienced the highest NMHOs mean scores [4.25, 4.00] due to teaching demands. Respondents aged 18–24 and 35–39 had the highest mean scores [4.75, 4.00] due to research demands. The highest mean scores for the administrative demands & skewed workloads were reported by the younger respondents aged 18–24 and 25–29 [4.00, 4.33], and were similar to

the mean scores reported by the older respondents aged 45–49 and 50+ [4.00, 4.25]. The younger cohort of respondents [18–24] had the highest NMHOs mean scores [4.00] due to KSAs. The younger groups aged 18–24, 25–29 experienced the highest NMHOs from professional & personal networking [4.00 and 4.00]. They also had the highest NMHOs from coaching support [3.75, 3.67 respectively]. On average, the younger cohort [18–24] experienced the highest NMHOs due to mentoring support [4.25]. On average, respondents aged 18–24 and 45–49 experienced the highest NMHOs due to compensation & rewards [3.50, 3.55 respectively].

#### 6.3.2.2. WEFs and Race

Black respondents reported the highest NMHOs mean scores from teaching demands [3.57] and from research demands than their White, Indian, and Coloured counterparts. White and Coloured respondents had the highest NMHOs mean scores from administrative demands & skewed workloads [4.16; 4.29] than Black and Indian respondents. Black respondents, on average, experienced the highest NMHOs due to KSAs [2.82], professional & personal networking [3.36], coaching support [3.21], mentoring support [2.96], and compensation & rewards [3.82].

#### 6.3.2.3. WEFs and Relationship Status

Teaching demands-related NMHOs experiences were reported by the single, married or partnered, and widowed respondents as high [M=3.36, M=3.47, M=3.00] compared to the divorced or separated respondents [M=2.89]. Average scores for all respondents on research demands-related NMHOs experiences were high, with the single and the married or partnered respondents reporting higher mean scores [3.96, 3.79] than the divorced or separated and the widowed respondents [3.56, 3.00]. The married or partnered, divorced/separated, widowed respondents [3.90, 4.22, 5.00] had significantly higher scores on the administrative demands-related NMHOs & skewed workloads-related NMHOs compared to the single respondents [3.68]. All respondents reported lower scores in relation to KSAs-related NMHOs, suggesting that KSAs were the least contributors of respondents' NMHOs experiences. Interestingly, only the widowed respondent reported an equal but moderate high mean score NMHOs for both WEFs of professional & personal networking [3.00] and coaching support [3.00]. The single and the widowed respondents reported slightly higher scores [3.20, 3.00 respectively] of

NMHOs from mentoring support compared to the married or partnered and the divorced or separated respondents. On the compensation & rewards-related NMHOs, only the married respondents reported a lower mean score relative to those that were single [3.28], divorced or separated [3.89] and widowed [5.00] [being the highest of the cohort].

#### 6.3.2.4. WEFs and Number of Children

The respondents' mean average scores on the WEFs-related NMHOs in terms of having children show that respondents with 3 children had the highest source of NMHOs from both teaching demands [3.62] and research demands [4.08]; respondents without children and the respondent who selected the "prefer not to say" option had the highest levels of NMHOs due to administrative demands & skewed workloads [4.05, 4.00]; respondents with 4 children and the respondent who selected the "prefer not to say" option experienced the highest NMHOs due to KSAs [3.00, 3.00]; and respondents with 4 children had the highest NMHOs from professional & personal networking [4.00], coaching support [5.00], mentoring support [5.00] and compensation & rewards [5.00].

#### 6.3.2.5. WEFs and Highest Qualification

The average mean scores of respondents' WEFs-related NMHOs by Highest Qualification show that respondents with a bachelor's degree felt the highest NMHOs due to teaching demands [5.00]; respondents with an honours degree experienced the highest NMHOs from research demands [4.67]; respondents with bachelor's degree experienced the highest NMHOs due to administrative demands & skewed workloads [5.00]; respondents with an honours degree felt the highest NMHOs from KSAs [4.00], professional & personal networking [3.67], coaching support [3.33], mentoring support [4.33], and compensation & rewards [3.67].

#### 6.3.2.6. WEFs and Years of Experience in Academia

The average mean scores of respondents' WEFs-related NMHOs by Years in Academia in general show that respondents who worked in academia for 5–9 years had the highest NMHOs from teaching demands [3.58]; respondents with less than 2 years of work in academia had the highest NMHOs due to research demands; respondents with more than 20 years of work in academia had the highest NMHOs due to administrative demands & skewed workloads [4.27];

respondents who were early academics, working in academia for less than 2 years reported the highest NMHOs due to KSAs [3.00], professional & personal networking [3.33], coaching support [3.50], and from mentoring support [3.50]; and respondents with 15–19 years of work experience in academia had the highest NMHOs from compensation & rewards [3.31].

#### 6.3.2.7. WEFs and Years of Employment at UKZN

The average mean scores of respondents' WEFs-related NMHOs by Years of Employment at UKZN show that respondents who worked at UKZN for 20 years and above had the highest NMHOs from teaching demands [3.89]; respondents who worked at UKZN for less than 1 year had the highest NMHOs from research demands [4.00]; respondents who worked at UKZN for 20 years and above had the highest NMHOs from administrative demands & skewed workloads [4.67]; respondents who worked at UKZN for less than 1 year had the highest NMHOs from KSAs [3.25], the highest NMHOs from professional & personal networking [3.75], and the highest NMHOs from compensation & rewards [3.50]; and respondents who worked at UKZN for less than 1 year and for 10–14 years had the highest NMHOs from coaching support [4.25 and 3.00 respectively] and the highest NMHOs from mentoring support [4.25 and 3.04 respectively].

#### 6.3.2.8. WEFs and Current Designation

The average mean scores of respondents' WEFs-related NMHOs by Current Designation show that among all respondents, lecturers, on average, felt the highest NMHOs due to teaching demands [3.71] and research demands [3.93]; the mean scores of NMHOs from administrative demands & skewed workloads were more or less the same for lecturers [4.03] and associate professors [4.05]. Although the respondents reported relatively low mean scores of NMHOs due to KSAs, professional & personal networking, coaching support, mentoring support, and compensation & rewards – lecturers, on average, experienced the highest NMHOs due to these types WEFs. This may suggest that respondents at the lowest rank such as lecturers tend to experience the highest levels of NMHOs-related WEFs than those at higher ranks at UKZN.

#### 6.3.2.9. WEFs and Contract Type

The average mean scores of respondents' WEFs-related NMHOs by Contract Type show that on average, fixed-term contract respondents [3.50] experienced the highest NMHO's from teaching demands compared to permanent contract [3.34] and temporary contract [3.25] respondents. Temporary contract respondents experienced the highest NMHO's from research demands [4.13] compared to fixed-term contract respondents [4.10] and permanent contract respondents [3.71]. Permanent contract respondents had the highest NMHO's from administrative demand and skewed workloads [3.90] compared to the temporary contract [3.63] and fixed-term contract [3.40] respondents. Respondents employed on temporary contract basis experienced the highest NMHO's from KSAs [3.38], while respondents employed on fixed-term contract basis experienced the highest NMHOs from coaching support [3.40]. Respondents employed on both fixed-term and temporary contract basis experienced the highest NMHOs from professional & personal networking [3.10 and 3.00 respectively], from mentoring support [3.40 and 3.13 respectively] and from compensation & rewards [3.70 and 3.00 respectively] compared to respondents employed on a permanent contract basis.

#### 6.3.2.10. WEFs and Home College

The average mean scores of respondents' WEFs-related NMHOs by College show that on average, respondents who were based in the College of Humanities had the highest NMHO's from teaching demands [3.61] and the highest NMHO's from administrative demands & skewed workloads [4.11]. Respondents from the CLMS experienced the highest NMHO's from research demands [4.35]. While all respondents reported relatively lower scores with regards to their experiences of NMHOs due to KSAs, professional & personal networking, coaching support, mentoring support, and compensation & rewards, both the Humanities and the CLMS cohorts report the highest levels of NMHOs on these WEFs compared to their CAES and Health Sciences counterparts.

### **6.3.3. The Relationship Between Demographics and Negative Mental Health Outcomes [NMHOs]**

Table 6.8 provides the mean scores of NMHO's by demographic and work-related factors.

**Table 6.8 Means for the Relationship Between Demographics and Negative Mental Health Outcomes [NMHOS] [N=112]**

	Stress	Burnout	Depression	Anxiety	Compassion Fatigue
<b>Age</b>					
18-24	3,50	3,00	3,00	3,75	3,75
25-29	4,00	3,67	3,00	3,67	3,33
30-34	3,90	3,30	2,70	3,60	3,00
35-39	3,88	3,53	2,41	3,41	2,88
40-44	3,54	3,19	2,65	3,23	3,12
45-49	3,60	3,25	2,85	3,45	2,70
50+	3,75	3,34	2,34	3,19	3,13
<b>Race</b>					
Black	3,79	3,57	3,25	3,86	2,93
White	3,84	3,30	2,45	3,34	3,11
Indian	3,31	3,10	2,14	2,79	2,83
Coloured	3,57	3,00	1,86	3,00	3,29
Other	4,00	1,00	1,00	3,00	4,00
Prefer not to say	5,00	4,67	5,00	5,00	3,67
<b>Relationship Status</b>					
Single	3,76	3,20	2,72	3,48	3,16
Married/Partnered	3,66	3,37	2,59	3,29	3,03
Divorced/Separated	4,11	3,33	2,56	3,89	2,89
Widowed	3,00	3,00	1,00	2,00	2,00
Prefer not to say	3,67	3,33	2,33	2,67	3,00
<b>Number of Children</b>					
0	3,79	3,24	2,66	3,37	3,18
1	3,70	3,20	2,60	3,70	3,15
2	3,69	3,44	2,64	3,08	2,87
3	3,62	3,46	2,38	3,77	2,77
4	3,00	2,00	2,00	3,00	4,00
Prefer not to say	3,00	3,00	1,00	1,00	3,00
<b>Highest Qualification</b>					
Bachelor's Degree	5,00	5,00	2,00	4,00	4,00
Honours Degree	3,00	2,33	2,33	3,33	3,33
Master's Degree	3,80	3,50	2,90	3,60	3,17
Doctoral Degree	3,69	3,24	2,47	3,22	2,92
Other	3,50	3,50	2,75	3,75	3,50

**Table 6.8. Means for the Relationship Between Demographics and Negative Mental Health Outcomes [NMHOS] [N=112] [Continued]**

<b>How Long Academic in General</b>					
Less than 2 years	3,17	3,33	2,83	3,83	3,17
2-4 years	3,73	3,20	2,47	3,33	2,93
5-9 years	4,05	3,74	3,11	3,89	3,32
10-14 years	3,68	3,39	2,21	3,11	2,96
15-19 years	3,55	3,21	2,76	3,17	2,93
20+ years	3,80	2,93	2,33	3,27	3,00
<b>How Long Academic at UKZN</b>					
Less than 1 year	3,50	3,50	3,25	4,50	3,50
1-4 years	3,58	3,35	2,73	3,35	3,00
5-9 years	3,92	3,33	2,54	3,46	3,04
10-14 years	3,96	3,71	2,67	3,63	3,25
15-19 years	3,28	2,96	2,32	2,76	2,76
20+ years	4,11	3,00	2,56	3,44	3,00
<b>Current Designation</b>					
Lecturer	3,81	3,43	2,78	3,55	3,21
Senior Lecturer	3,93	3,14	2,64	3,14	2,64
Associate Professor	3,20	3,05	2,05	2,80	2,80
Full Professor	3,50	2,75	1,50	2,00	2,50
Other	3,81	3,50	2,81	3,81	3,13
<b>Contract Type</b>					
Temporary	3,88	3,25	3,13	3,50	3,50
Fixed-term	3,90	3,60	3,00	4,10	3,20
Permanent	3,63	3,23	2,48	3,21	2,96
<b>College</b>					
Humanities	3,82	3,32	3,07	3,89	3,11
CAES	4,00	3,38	2,62	3,31	3,08
Health Sciences	3,51	3,38	2,19	2,86	2,95
CLMS	3,45	3,00	2,50	3,45	2,90

Notes: Given the aim of the study, regarding Table 6.8 variables [NMHOS], only the variables' highest mean scores are described in text.

### 6.3.3.1. NMHOS and Age

The results of respondents' experiences of NMHOS by Age in Table 6.8 show that, on average, the 25–29, the 30–34 and the 35–39 age groups had the highest levels of stress [M=4.00, M=3.90, M=3.88 respectively]; the 25–29 and the 35–39 age groups had the highest levels of

burnout [3.67, 3.53]; the 18–24, the 25–29 and the 30–34 age groups had the highest levels of anxiety [3.75, 3.67, 3.60]; the 18–24 and the 25–29 age groups had the same highest levels of depression [3.00, 3.00 respectively] and also scored the highest on levels of compassion fatigue [3.75, 3.33 respectively].

#### 6.3.3.2. NMHOs and Race

The results indicate that among the respondents, White respondents [3.84] and Black respondents [3.79] felt the highest mean stress scores, followed by Coloured Respondents [3.57] and Indian Respondents [3.31]; the mean burnout scores were highest among Black respondents [3.57], followed by White respondents [3.30] and Indian Respondents [3.10]; the highest mean depression score was reported by Black respondents [3.25] only; the Black and the White respondents felt the highest levels of anxiety [3.86 and 3.34]; compassion fatigue scores were highest among the Coloured [3.29] and the White respondents [3.11] compared to their Black and Indian counterparts.

#### 6.3.3.3. NMHOs and Relationship Status

The results indicate that among the respondents, the divorced or separated respondents felt the highest stress mean scores [4.11] compared to the single and the married or partnered respondents with moderately high scores [M=3.76, M=3.66]. The married or partnered respondents had a higher mean burnout score [3.37] than the divorced or separated respondents [3.33] and the single respondents [3.20]. All respondents had relatively low mean scores on experiences of depression relative to their relationship status. Similar to the scoring pattern of the stress variable, the divorced or separated respondents had a higher mean anxiety score [3.89] compared to the single respondents [3.48] and the married or partnered respondents [3.29]. the single and the married or partnered respondents had moderately higher compassion fatigue scores [M=3.16 and M=3.03] relative to the married or partnered and the divorced or separated respondents.

#### 6.3.3.4. NMHOs and Number of children

The results show that the mean stress scores of respondents were close to each other, however, respondents without children had the highest mean stress score [3.79] followed by respondents with 1 child [3.70], respondents with 2 children [3.69] and respondents with 4 children [3.62]. The mean burnout scores were highest for respondents with 3 children [3.46] and respondents with 2 children [3.44] compared to respondents without children [3.24] and respondents with 1 child [3.20]. The mean depression score was low among all respondents in relation to the question of having children. Respondents with 3 children and those with 1 child experienced more or less the same levels of anxiety [M=3.77 and M=3.70 respectively] and scored higher than respondents with no children [3.37] and the other groups. Respondents with 2 children experienced the highest level of compassion fatigue [4.00] followed by respondents with no children [3.18] and respondents with 1 child [3.15].

#### 6.3.3.5. NMHOs and Highest Qualification

The results indicate that respondents with a Bachelor's qualification experienced much higher levels of stress [5.00] and burnout [5.00] and experienced relatively higher levels of anxiety [4.00] and compassion fatigue [4.00] compared to the other three cohorts. Depression levels were relatively low among all different academic qualification cohorts.

#### 6.3.3.6. NMHOs and Years of Experience in Academia

The results indicate that respondents with 5–9 years of experience as an academic in general had the highest levels for all NMHOs, for example, stress [4.05], burnout [3.74], depression [3.11], anxiety [3.89] and compassion fatigue [3.32] compared to all other years of experience groups.

#### 6.3.3.7. NMHOs and Years of Employment at UKZN

The result show that respondents who worked at UKZN for 20 years and over had on average, the highest levels of stress [4.11]; respondents who worked at UKZN between 10–14 years had the highest burnout mean score [3.71]; and respondents who worked at UKZN for less than 1 year had the highest mean scores for depression [3.25], anxiety [4.50] and compassion fatigue [3.50].

#### 6.3.3.8. NMHOs and Current Designation

The results show that on average, senior lecturers and lecturers had the highest mean score for stress [3.93, 3.81] relative to associate professors and full professors. Lecturers and senior lecturers had the highest mean scores for burnout [3.43 and 3.14, respectively] and anxiety [3.55 and 3.14, respectively]. No high relationship mean scores were recorded for any of the cohorts based on depression levels and respondents' academic designation. Furthermore, only lecturers had a slightly higher mean compassion fatigue score of [3.21] compared to all other academic work designation cohorts.

#### 6.3.3.9. NMHOs and Contract Type

Respondents employed by UKZN on a fixed-term basis and temporary basis had the highest levels of stress [3.90 and 3.88, respectively], burnout [3.60 and 3.25, respectively] and anxiety [4.10 and 3.50, respectively] relative to the levels of stress, burnout, and anxiety [3.63, 3.23, and 3.21, respectively] of respondents employed on a permanent basis. Temporary contract and fixed-term respondents had higher levels of depression [3.13 and 3.00, respectively] and compassion fatigue [3.50 and 3.20, respectively] compared to permanent contract respondents.

#### 6.3.3.10. NMHOs and College

Across all colleges, stress levels were higher among respondents in the CAES [4.00], followed by respondents in the College of Humanities [3.82], the Health Sciences [3.51] and the CLMS [3.45]. The mean burnout scores of respondents based on their college of work were more or less the same, however, respondents from the CAES and the college of Health Sciences experienced a slightly higher [and the similar] level of burnout [3.38 and 3.38] compared to respondents from the college of Humanities [3.32] and CLMS [3.00]. The levels of depression were slightly higher in respondents working in the college of Humanities [3.07] compared to those from the other colleges. The average levels of anxiety were relatively high in respondents from the colleges of Humanities [3.89], CLMS [3.45] and CAES [3.31] except that of the Health Sciences. On average, the mean score levels of compassion fatigue across the colleges were moderately low, with only the colleges of Humanities and CAES respondents reporting a slightly higher level of compassion fatigue [3.11 and 3.08, respectively] than the Health Sciences and CLMS counterparts.

#### **6.3.4. The Relationship Between Demographics and Building Blocks of Psychological Resilience [BBPRs]**

Table 6.9 shows the mean scores for items on the determinants of Psychological Resilience by demographic characteristics.

**Table 6.9. Means for the Relationship Between Demographics and Building Blocks of Psychological Resilience [BBPRs] [N=112]**

	Neuroticism	Mindfulness	Self-efficacy	Coping
<b>Age</b>				
18-24	2,50	3,50	3,25	3,50
25-29	3,33	3,00	4,00	3,33
30-34	3,00	2,90	3,50	3,40
35-39	2,88	3,18	3,88	3,47
40-44	2,38	3,42	3,96	3,65
45-49	2,60	3,50	4,20	4,10
50+	2,38	3,41	3,66	3,84
<b>Race</b>				
Black	3,04	3,68	4,14	3,86
White	2,52	3,20	3,77	3,84
Indian	2,21	3,28	3,66	3,38
Coloured	2,00	3,43	4,14	3,86
Other	2,00	4,00	5,00	5,00
Prefer not to say	4,33	2,33	2,67	3,33
<b>Relationship Status</b>				
Single	2,88	3,28	3,92	3,68
Married/Partnered	2,51	3,23	3,79	3,73
Divorced/Separated	2,44	4,11	4,11	3,89
Widowed	3,00	4,00	5,00	5,00
Prefer not to say	2,00	4,00	3,00	3,00
<b>Number of Children</b>				
0	2,82	3,32	3,89	3,74
1	3,15	3,15	3,85	3,90
2	2,23	3,41	3,87	3,64
3	2,08	3,54	3,69	3,77
4	3,00	2,00	3,00	3,00
Prefer not to say	2,00	4,00	3,00	3,00
<b>Highest Qualification</b>				
Bachelor's Degree	2,00	4,00	4,00	3,00
Honours Degree	1,67	3,67	3,00	3,33
Master's Degree	2,93	3,47	3,97	3,53
Doctoral Degree	2,46	3,27	3,85	3,82
Other	3,00	3,25	3,25	3,75

**Table 6.9. Means for the Relationship Between Demographics and Building Blocks of Psychological Resilience [BBPRs] [N=112] [Continued]**

<b>How Long Academic in General</b>				
Less than 2 years	2,67	3,83	3,83	3,50
2-4 years	3,00	3,27	3,93	3,53
5-9 years	2,89	3,21	3,68	3,79
10-14 years	2,21	3,29	3,86	3,57
15-19 years	2,62	3,45	4,00	3,97
20+ years	2,33	3,27	3,60	3,73
<b>How Long Academic at UKZN</b>				
Less than 1 year	2,75	4,25	4,25	4,00
1-4 years	3,31	3,15	3,73	3,69
5-9 years	2,29	3,38	3,92	3,88
10-14 years	2,63	3,46	3,92	3,54
15-19 years	2,20	3,28	3,68	3,64
20+ years	2,11	3,22	4,00	4,00
<b>Current Designation</b>				
Lecturer	2,66	3,41	3,93	3,86
Senior Lecturer	2,71	3,14	3,79	3,14
Associate Professor	1,85	3,25	3,80	3,75
Full Professor	2,00	3,25	3,25	3,75
Other	3,25	3,38	3,75	3,69
<b>Contract Type</b>				
Temporary	3,13	3,13	3,38	3,38
Fixed-term	2,90	3,40	4,10	3,80
Permanent	2,45	3,33	3,84	3,75
<b>College</b>				
Humanities	2,89	3,57	4,07	4,07
CAES	2,88	3,15	3,58	3,42
Health Sciences	2,24	3,24	3,86	3,57
CLMS	2,25	3,45	3,80	3,90

Notes: Given the aim of the study, regarding Table 6.9 [BBPRs], only the highest mean score for neuroticism is described in text while only the lowest mean scores for mindfulness, self-efficacy and coping variables are described in text.

#### 6.3.4.1. BBPRs and Age

The results in Table 6.9 illustrate that, on the relationship between BBPRs and Age, lower age groups [particularly age 25–29 and 30–34 groups] experienced moderately to slightly higher levels of neuroticism [3.33 and 3.00, respectively] when compared with higher age groups. This indicates that the risk of experiencing neuroticism was higher for younger age groups than older age groups. The average scores for mindfulness, self-efficacy and coping were slightly higher for all age groups, except for respondents aged 30–34 years old with a slightly lower mean score for mindfulness [2.90].

#### 6.3.4.2. BBPRs and Race

On the BBPRs and Race relationship, the average scores for neuroticism were slightly higher for Black respondents [3.04] compared to all Race groups. The average scores for mindfulness, self-efficacy and coping were slightly higher for all groups.

#### 6.3.4.3. BBPRs and Relationship Status

On the relationship between BBPRs and Relationship Status, the average scores for neuroticism were slightly higher for the widowed respondent [M=3.00] than for all other groups. The average scores for mindfulness, self-efficacy and coping were slightly to moderately high for all groups. This suggests that, in general, respondents' relationship status had an influence to respondents' high levels of resilience.

#### 6.3.4.4. BBPRs and Number of Children

On the BBPRs and Number of Children relationship, the average scores for neuroticism were slightly higher for respondents with 1 child [3.15] and respondents with 4 children [3.00] compared to the other cohorts. The average self-efficacy and coping scores were slightly higher for all groups.

#### 6.3.4.5. BBPRs and Highest Qualification

On the BBPRs and Highest Qualification relationship, the average scores for neuroticism were slightly lower for all groups. The average scores for mindfulness, self-efficacy and coping were slightly and moderately high for all groups.

#### 6.3.4.6. BBPRs and Years of Experience in Academia

On the relationship between BBPRs and years of academic work experience, the average score for neuroticism were higher for respondents with 2–4 years of experience of work in academia [3.00] compared to all other groups. The average scores for mindfulness, self-efficacy and coping were reported slightly and moderately high among all groups.

#### 6.3.4.7. BBPRs and Years of Employment at UKZN

On the relationship between BBPRs and years of work for UKZN, the average scores for neuroticism were higher for respondents with 1–4 years of employment at UKZN [3.31]. The average scores for mindfulness, self-efficacy and coping were moderately higher for all groups compared to all other groups. Both the results regarding the relationship between BBPRs and years of experience as an academic in general, and BBPRs and years of working at UKZN suggest that the highest levels of neuroticism were reported by respondents with 1 to 4 years of academic work experience.

#### 6.3.4.8. BBPRs and Current Designation

On the relationship between BBPRs and Current Designation, lower average scores for neuroticism and higher average scores for mindfulness, self-efficacy and coping were reported by all Current Designation subgroups.

#### 6.3.4.9. BBPRs and Contract Type

On the BBPRs and contract type relationship, the average scores for neuroticism were slightly higher for respondents on a temporary contract basis [3.13] compared to the fixed-term and permanent contract counterparts. The average scores for mindfulness, self-efficacy and coping were slightly higher for all contract type groups.

#### 6.3.4.10. BBPRs and College

On the relationship between BBPRs and college, lower average scores for neuroticism and higher average scores for mindfulness, self-efficacy and coping were observed among respondents from all four colleges of work.

### 6.4. CHAPTER SUMMARY

This chapter presented the results of the quantitative phase [phase-one] of this study which aimed:

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.
- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

This chapter comprised of a first descriptive statistics section and a second inferential statistics section. In the first section of the chapter, the results of the study's phase-one survey were illustrated, initially with a summary report of the demographic information [Frequencies and Percentages] of the study sample. This was followed by the summary results [Means and Standard Errors] of the survey scales' responses relative to the quantitative research questions or main variables of the study [CD-RISC statements, WEFs, NMHOs, and BBPRs]. These initial results presented the overall picture of FAs' perceptions of their experiences of the main

variables of the study. In other words, their perceptions of their workplace environmental factors that are affecting their psychological resilience. More generally, the initial results revealed that the highest WEFs causing NMHOs among respondents were administrative demands & skewed workloads, followed by research demands, teaching demands and compensation & rewards. When considering each of the NMHOs in isolation, the results further revealed that respondents experienced relatively high levels of stress, followed by moderately higher levels of anxiety, burnout, and slightly higher levels of compassion fatigue due to WEFs; but experienced moderately low levels of depression due to WEFs.

The second section of the chapter illustrated the results of the relationships between the main variables of the study and the demographic characteristics of the respondents [showing differences in respondents' CD-RISC items' score levels, WEFs-related NMHOs score levels, NMHOs score levels, and BBPRs score levels]. These results revealed that a high number of FAs' respondents in the study were generally experiencing higher levels of WEFs-related NMHOs compared to their female colleague counterparts at UKZN – relative to their demographic characteristics or employment profile.

In chapter eight, the quantitative phase-one findings are interpreted and discussed along with the qualitative phase-two findings which are presented in the next chapter seven.

## **CHAPTER SEVEN**

### **QUALITATIVE PHASE DATA FINDINGS**

#### **7.1. INTRODUCTION**

This chapter presents the findings of the qualitative data collected in phase-two of the study. It aims to explain how participants experienced the salient self-reported levels of negative mental health outcomes [NMHOs] and building blocks of psychological resilience [BBPRs] associated with workplace environmental factors [WEFs], as discussed in the previous chapter. The qualitative sample comprised of 27 female academics [FAs] who participated in the study's quantitative phase-one and met the selection criteria to participate in the study's phase-two. This consideration addressed the issue of the integration of samples between the two phases. All the research participants were individually interviewed using the online Zoom video-conferencing platform. The participants were asked semi-structured interview questions comprising of a set of pre-prepared questions followed by follow-up probing questions aimed to enlighten the participants' specific survey responses.<sup>21</sup> Following the researcher's explanations of the aim of the study to the participants and what their participation in the study's phase-two involved, written and verbal consent was obtained from all the participants to tape record their interviews.<sup>22</sup> The duration of all 27 interviews combined, was approximately 42 hours in total with an outcome of 348 838 words total [approx. 907 pages] from the transcribed interviews.<sup>23</sup> All interviews were transcribed verbatim by an independent professional data transcriber, in line with a signed non-disclosure agreement to guarantee the confidentiality of the research participants.

As has been reported in chapter six, consideration of demographic factors of the participants was also explored in phase-two and has revealed important contextual influences upon FAs' experience of WEFs, NMHOs and BBPRs. Since this study's sample was formally employed by the university under study, it was also of paramount importance to understand how the participants experienced or perceived the role of the university's human resource management

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<sup>21</sup> See: Appendix F.

<sup>22</sup> See: Appendix B.

<sup>23</sup> See: Appendix G.

in supporting their resilience to dealing with WEFs-related NMHOs. Given these considerations, the two objectives of phase-two were as follows:

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

A qualitative thematic analysis process was carried out by the researcher using the qualitative data analysis software NVivo, Version 12, to accomplish these phase-two objectives (Campbell, 2020). This fundamental process aimed to help identify, understand, interpret, and report important trends within the data collected in the form of themes (Braun & Clarke, 2021; Finlay, 2021; Kiger & Varpio, 2020; Salkind, 2017). More specifically, the following six-step process of thematic theorised by Braun and Clarke (2021) were followed to analyse the interviews: data familiarisation [step one]; generating initial codes [step two]; searching for themes [step three]; reviewing themes [step four]; defining and naming themes [step five]; and reporting themes [step six]. This process has allowed for an in-depth understanding of the data which resulted in sixteen broader themes.<sup>24</sup> These themes were designed to capture a range of information, including the important interactions between participants' demographic factors, WEFs, NMHOs and BBPRs. Given the richness of the data as exemplified by the number of hours and resulting number of words of the interviews, the researcher discovered sixteen broader themes. While the number of themes may be higher than what is normally found in interview data, given the volume and the richness of the data, the number of themes identified for this study was deemed appropriate. Thirteen out of the 16 themes reported in the chapter were further divided into related sub-themes. A tabular presentation of the main themes and their applicable sub-themes which derived from the thematic data analysis, is provided in Table 7.1.

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<sup>24</sup> Further insightful data findings/extracts for these themes are available on request.

**Table 7.1. Interview Data Frequencies: Themes and Corresponding Sub-Themes**

Theme	Sub-theme	Frequency of themes
Theme 1: The impacts of the socially constructed role of the female gender on FAs' experiences of WEFs-related NMHOs	No Corresponding Sub-theme	16 / 27
Theme 10: Negative experiences and perceptions of participants in relation to HRM roles in supporting their WEFs-related NMHOs experiences	No Corresponding Sub-theme	14 / 27
Theme 16: When WEFs-related NMHOs are high, HRM resilience interventions are needed	No Corresponding Sub-theme	16 / 27
Theme	Sub-theme	Frequency of sub-themes
Theme 2: Teaching Demands [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Effects of teaching work-related NMHOs on the physical health of participants	12 / 27
	Sub-theme 2: Large classes, underprepared students, and ongoing re-design of the teaching curriculum	10 / 27
	Sub-theme 3: Teaching also involved providing training to students on the job	7 / 27
	Sub-theme 4: Online learning and teaching during the Covid-19	12 / 27
	Sub-theme 5: Students' Representative Council [SRC]'s demands and students' strikes, result in lecturing programme disruptions and high levels of NMHOs	6 / 27
	Sub-theme 6: Participants' compassion fatigue associated with students' consultations	8 / 27
Theme 3: Research Demands [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Participants physical health adverse outcomes due to research work-related NMHOs	14 / 27
	Sub-theme 2: The academia pressures of meeting the credentialing requirements	12 / 27

	Sub-theme 3: Publication units [PUs] and the key performance areas [KPAs]	14 / 27
Theme 4: Administrative & Skewed Workloads [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Lack of teaching assistants [tutors] and increased administrative/skewed workloads	17 / 27
	Sub-theme 2: Additional time consuming [unproductive] administrative/skewed workloads	16 / 27
Theme 5: Knowledge, Skill, and Ability [KSAs] [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Lacking teaching KSAs and need for more experience through training	8 / 27
	Sub-theme 2: Teaching junior versus students senior and importance of prior teaching training	10 / 27
	Sub-theme 3: Negative collegial atmosphere and lack of KSAs mentorship support and collaborative teamwork	13 / 27
Theme 6: Professional & Personal Networking [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Experiences/perceptions of victimisation, stigmatisation and bullying at work	10 / 27
	Sub-theme 2: Possible link between hostile and negative behaviour of other people at work and compassion fatigue	12 / 27
Theme 7: Coaching Support [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Female academics' self-coaching initiatives	14 / 27
	Sub-theme 2: More coaching support for the younger [and black] academic staff than tenured/senior academics	7 / 27
Theme 8: Mentoring Support [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Female academics' self-mentoring initiatives	12 / 27
	Sub-theme 2: Female academics and work-life-balance issues	14 / 27
	Sub-theme 3: Insourcing coaching and mentoring support initiatives can support resilience	16 / 27
Theme 9: Compensation & Rewards [Factors] Contributing to Participants' NMHOs	Sub-theme 1: Financial/extrinsic rewards of fixed-term and temporary contract participants	7 / 27
	Sub-theme 2: Financial/extrinsic rewards of permanent contract participants	10 / 27
Theme 11: Benefits of Promoting Lower Levels of Neuroticism [NMHOs]	Sub-theme 1: Mental health stigma associated with higher levels of neuroticism	15 / 27
	Sub-theme 2: There is link between levels of neuroticism and a sense of workplace resilience support	16 / 27

Theme 12: Benefits of Promoting Higher Levels of Mindfulness	Sub-theme 1: Mindfulness, flexi hours and work-life balance	13 / 27
	Sub-theme 2: Lack of control of over the workload, and lack of control of emotional reaction to certain WEFs and self-doubt	7 / 27
	Sub-theme 3: Enhancing the level and practice of mindfulness	10 / 27
Theme 13: Benefits of Promoting Higher Levels of Self-efficacy	Sub-theme 1: Being permanently employed can strengthen self-efficacy and promote resilience	12 / 27
	Sub-theme 2: Not being permanent and applying self-efficacy as a self-promoting approach to secure future work contract renewal	5 / 27
	Sub-theme 3: Ability to exercise self-control over one's future life experiences	15 / 27
	Sub-theme 4: Awareness of personality and recognition of strengths and weaknesses	14 / 27
Theme 14: Benefits of Promoting Higher Levels of Coping KSAs	Sub-theme 1: Institutional support is important for enhancing coping protective mechanisms	17 / 27
	Sub-theme 2: The differences between having and not having positive coping mechanisms	12 / 27
Theme 15: Additional Theme: The traditional psychological resilience definitions can be misconstrued	Sub-theme 1: Deconstructing resilience to expose more pragmatic and functional resilience HRM interventions aimed at preventing or managing NMHOs among FAs in HEIs	15 / 27

Table 7.1 provides an overall sense of the frequency of which the themes/sub-themes appeared in the interview data. It also serves to highlight the relevance of the qualitative data, as well as help strengthen the reader's understanding of the interpretation and explanation of the findings in this chapter. Having highlighted the steps involved in the study's phase-two data analysis process, and highlighted the themes and sub-themes that emerged from the data analysis of this study, the qualitative findings are now presented/reported.

### **7.1.1. Description of the Study Sample [Demographic Variables] [Phase-Two]**

Table 7.2 illustrates the findings regarding the demographic characteristics and academic/career backgrounds of the 27 research participants in phase-two which were found to be instrumental to the researcher in gaining a strong sense of the data. From the researcher's perspective, and influenced by the thematic analysis process, both the participants' non-

demographic factors and demographic factors influenced how they perceived their academic identities and levels of resilience, which in turn influenced how they perceived or experienced a given WEF-related NMHOs. These patterns are evident in the data extracts reported in the chapter, reflecting to varying degrees, the differences, and similarities among the participants. Thus, the phase-two findings have been reported in light of the participants' responses to the survey's variables and participants' demographic and academic/career contexts as evidenced in several resilience stories of different participants in phase-two. These considerations are intended to address the objectives of phase-two and thereby aid the reader towards a deeper understanding of the findings reported.

**Table 7.2. Demographic Factors and Academic Profile of Phase-Two Participants**

Participant	Age [years]	Race	Relationship status	Number of children	Highest Qualification	How long academic in general [years]	How long academic at UKZN [years]	Current Designation	Contract Type	College
P1	40-44	White	Married/Partnered	3	Doctoral	15-19	15-19	Lecturer	Permanent	Humanities
P2	35-39	Indian	Married/Partnered	2	Doctoral	10-14	10-14	Lecturer	Permanent	Health Sciences
P3	30-34	White	Single	0	Doctoral	5-9	1-4	Senior Research Scientist	Fixed-term	CAES
P4	40-44	Black	Married/Partnered	0	Master's	15-19	15-19	Lecturer	Permanent	CLMS
P5	45-49	White	Married/Partnered	2	Doctoral	15-19	10-14	Senior Lecturer	Permanent	CAES
P6	35-39	Black	Married/Partnered	2	Doctoral	5-9	5-9	Senior Lecturer	Permanent	Health Sciences
P7	35-39	Black	Married/Partnered	2	Master's	2-4	1-4	Lecturer	Permanent	Health Sciences
P8	40-44	Indian	Married/Partnered	3	Doctoral	10-14	10-14	Associate Professor	Permanent	Health Sciences
P9	35-39	White	Married/Partnered	0	Doctoral	10-14	10-14	Senior Lecturer	Permanent	CLMS
P10	40-44	Indian	Married/Partnered	0	Doctoral	15-19	10-14	Associate Professor	Permanent	Health Sciences
P11	50+	White	Prefer not to say	2	Doctoral	20 >	15-19	Associate Professor	Permanent	CAES
P12	50+	White	Divorced/Separated	2	Doctoral	10-14	10-14	Associate Professor	Permanent	Health Sciences
P13	50+	White	Married/Partnered	2	Doctoral	10-14	5-9	Associate Professor	Permanent	Health Sciences
P14	18-24	Indian	Single	0	Master's	2-4	1-4	Mentor [Tutor]	Temporary	Health Sciences
P15	30-34	Black	Married/Partnered	0	Master's	< 2	< 1	Lecturer	Permanent	CAES
P16	35-39	Black	Prefer not to say	1	Doctoral	2-4	1-4	Lecturer	Permanent	Health Sciences
P17	45-49	Black	Divorced/Separated	2	Doctoral	5-9	5-9	Lecturer	Permanent	CLMS
P18	40-44	White	Married/Partnered	1	Doctoral	10-14	1-4	Lecturer	Permanent	Humanities
P19	40-44	Indian	Married/Partnered	1	Doctoral	10-14	10-14	Associate Professor	Permanent	Health Sciences
P20	25-29	Black	Single	0	Master's	5-9	1-4	Lecturer	Fixed-term	Humanities
P21	30-34	Indian	Single	0	Doctoral	2-4	1-4	Post-doc & P/T lecturer	Fixed-term	CLMS
P22	50+	White	Single	0	Doctoral	20 >	20 >	Associate Professor	Temporary	Health Sciences
P23	30-34	Indian	Married/Partnered	0	Master's	5-9	1-4	Lecturer	Temporary	Humanities
P24	45-49	Indian	Married/Partnered	2	Master's	15-19	15-19	Lecturer	Permanent	Health Sciences
P25	40-44	Black	Married/Partnered	0	Doctoral	5-9	5-9	Lecturer	Temporary	Humanities
P26	40-44	Indian	Married/Partnered	2	Doctoral	2-4	1-4	Associate Professor	Permanent	Health Sciences
P27	45-49	White	Married/Partnered	4+	Master's	15-19	5-9	Lecturer	Permanent	Humanities

## 7.2. THE EXPERIENCES OF WEFs-RELATED NMHOs AMONG FEMALE ACADEMICS

The first research question of the study's qualitative phase-two was a follow-up question designed to explain the quantitative phase-one results. It focused on how the participants described their perceptions or lived experiences of their own psychological resilience, WEFs, NMHOs and BBPRs.

### 7.2.1. Introduction to the First Research Question of Phase-two [Research Question 6]

In exploring the participants' explanations of their quantitative survey responses [phase-one], it was important to gain insights into how they made meaning of the way their WEFs-related NMHOs experiences related to the concept of resilience. Concerns were raised by most of the participants that their negative experiences of resilience were directly influenced by patriarchal institutionalism. The participants objected to the frequent generalised assumption that "women have these inbuilt, mythical strength, unhuman strength that is based on their gender" and therefore it might be easier for women to endure any form of adversity in a workplace environment setting.

#### 7.2.1.1. Theme 1: The Impacts of the Socially Constructed Role of the Female Gender on FAs' Experiences of WEFs-related NMHOs

An overall sense from the participants' responses indicate that gender assumptions/blindness contributed to a reluctance by HEIs to make further provisions to address FAs' WEFs-related NMHOs. Speaking from the perspective of a lawyer that specialised in labour law and was a single parent raising two children, participant P17 illuminated how these assumptions contributed to the unresolved issues of women's health and mental health of women in academia:

*...the construct in which we are working is based on a norm that is male, heterosexual, has not childbearing duties. So, we still working under that framework. And that framework has built within it the idea that when you appropriate someone else, the women will be at home taking care of children and that's not your responsibility. So, we'd have to break down the structure itself and we reimagine and assemble it rather than trying to fit women into an already oppressive structure which basically, I mean, this is why women literally some don't have children or put off having children for a long time. And those who do really, the experience of having to do both [work and family duties] is extremely onerous. So, the idea that "because I was able to raise two children on my own without help and in the midst of that, work full time as an academic and then manage to credential and do my PhD and so on, it means that I am strong and somehow resilient", is something from my personal*

*perspective, that is exceedingly offensive because it reinforces the idea that the status quo [WEFs-related adversity] as I have experienced it, it's perfectly normal because women have these inbuilt, mythical strength, unhuman strength that is based on their gender. Which is also patriarchal and sexist in all manners to say that about women that men don't have [resilience strength] or that women who aren't in that position don't have [resilience strength]. So...there is plenty they [the institution] can do but is there willingness to dismantle the structure? I don't believe there is. It's just cosmetic things. [P17, lecturer, doctorate degree]*

In addition, the participants regarded their roles as academics as not only being important to them, but also signalling the value of women working in South African HEIs. However, the participants' general sentiment regarding their WEFs-related concerns was that they were faced with a persistent gender-blinded institutional management and HRM policies/interventions, which lead to their experiences of increased levels of WEFs-related NMHOs. Both P3 and P24 illuminated this issue further, by describing how the aspect of gender drives the negative experiences that women in academia face, and the importance of promoting a non-gendered workplace environment that is sensitive to the individuals needs of women in academia:

*Yes, I think there are [differences in experiences of NMHOs between female and male academics], I think that because of some of the additional pressures that women come up against, I think that sometimes there is almost a need for... it is almost like a network of being able to contact other women and just be able to say I am trying to get papers written and I have also got to balance this with childcare or whatever it may be or looking after elderly relatives and how do you find the time for this kind of things and being able to have this more informal discussions and I think having that support network within the university is really valuable with our academics and I think that you almost need to be able to pull some of the key ideas with that to then share with the male academics, of saying when you are working do you have to balance your workload with responsibilities at home, whether that is care responsibilities...or do you ever help organise events on the office or who takes meeting minutes in the meetings that you attend. Is there something that male academics can do to recognise*

*the additional stressors that female academics are under and what can they do to either alleviate that stress or just to have those conversations with the women that they work with are going. So, what is the most challenging thing for you in the office at the moment because a lot of the ways that we can support women academics. [P3, no children, doctorate degree]*

*... and it [the way a woman academic WEFs-related challenges is addressed] depends on who is sitting at the head of that management team, because their own bias and the way they view women and women academics and if you are a vocal woman academic and you are someone that can speak your mind or be robust in the way in which you engage with matters – certainly my experience in the school has been that if you are this robust somebody – then you are quickly identified as someone that we should manage, we need to manage that particular individual. And in university with academic freedom with all of that I do not believe that any personality needs to be managed or minimised and my personal view is that I was actually in, the situation was created or the way the [job] advert was created [which I have been told I] didn't qualify for, was simply to get rid of me out of that management team and I believe strongly about it because I engage robustly, I ask the necessary questions, I am fully aware of the REACH Principles and how you do it in a respectful way. But with the institutional memory that I have I am sitting in a position that I can ask the question and unfortunately some of the people that sit in these positions are not prepared to be challenged in that way, and so they rather want to keep you quiet, and especially if you are woman, you are then just not taken seriously. [P24, lecturer, 15–19 years at UKZN]*

Understandably, the data suggests that the majority of the participants felt they might be more vulnerable to experiencing WEFs-related NMHOs as compared to their male counterparts within the university setting. Insights into the participants' personal stories, vis-à-vis the participants' WEFs-related NMHOs experiences, in response to the first question are outlined in the following sections.

## 7.2.1.2. Theme 2: Teaching Demands [Factors] Contributing to Participants' NMHOs

The majority of the research participants [19 of 27 or 70%] reported experiencing higher levels of NMHOs due to teaching workload demands.

### 7.2.1.2.1. *Sub-theme 1: Effects of teaching work-related NMHOs on the physical health of participants*

The majority of the participants reported being actively involved with teaching and learning work activities and experiencing NMHOs at various points in their work lives when they could not cope with the demands of their teaching workloads. Some of the participants shared experiences that demonstrated that teaching-related NMHOs had the potential to also affect the physical health and wellbeing of the participants adversely. Research participant P22, who had worked for the university for more than 20 years, and who was the only retired participant who participated in the phase-two of the study, described being currently appointed as an honorary associate professor on a temporary basis at the university. While recalling her own personal experiences of negative mental and physical health that resulted from having heavy lecture loads, P22 highlighted the importance of HEIs directly intervening in HRM resilience-related policies to foster FAs' resilience early:

*I think that what very often happens to people in leadership, in stressed departments and what happened very much with me is that ... on top of running the department, I had an incredibly heavy lecture load and supervision load and all the rest of it, and going back to what you said of the effects on the physiological load and [at] one stage, I had a real burnout where I got myalgia encephalomyelitis, it is a chronic fatigue syndrome. And I was really sick. I was sick for three years but I couldn't stop working because there was nobody there to take over from me. So, I couldn't leave the sinking ship so I would have to take the day. ... So, when I was so incapacitated, I could hardly move, I would take a day off. But for most part I had to work through that time and that was very difficult and that I have no doubt about it, my immune system was low at by the fact that I was so under stress and there was nobody out there monitoring me or nobody out there making sure that I was okay or I had some support. I was on my own and had to do it. ... And I think that the university has to be*

*very cautious with leadership and monitoring leadership and making sure that leadership has the support so that they don't get themselves to such a level of burnout that they actually almost collapse. [P22, Associate Professor]*

7.2.1.2.2. *Sub-theme 2: Large classes, underprepared students, and ongoing re-design of the teaching curriculum*

The participants responses indicated that the experiences of increased NMHOs in the context of teaching workloads were due to teaching large classes, teaching students whose level of academic preparedness was poor, and the fact that many of the students did not have learning materials available. This meant the frequent redesign of the teaching materials and fast-tracking of students who were somewhat behind in terms of understanding the syllabus.

*... what I have found increasingly is that our students and I am saying that particularly because I am dealing with a first-year class, which is obviously, it's the largest class within our discipline. ... the students are just not academically prepared for university study, so the amount of time you have to then sort of almost invest in getting them up to a standard where you can then do what you feel you supposed to be doing with them. It takes a lot more time; it takes a lot more energy. You are constantly sort of trying to redesign and re-adjust your teaching materials and your teaching process in order to accommodate your students. ... when you are working with students who are less and less prepared it means you take longer to mark because if you want to mark in any meaningful way where you can give them feedback and you can try and given them some guidance and understanding of what they need to do it is going to take you longer. [P1, Lecturer, 15-19 years in academia/UKZN]*

*... There are around 700 to 900 students in one semester. You're not teaching all of them, but you are teaching, maybe 300 of them, you know, so your lecture theatre is full of students. So, you need to prepare for, you know, lecturing, or big, big classroom. And that takes time and energy from you because you are going through the teaching manual, and you're relearning everything. And that takes time. And you need to look at those, we are given presentation slides. So, you need to look at those slides. And sometimes, you know, you change it*

*according to how you see things. And that takes time and effort as well, you know... [P23, temporary contract lecturer]*

*I think one thing is really hampered our teaching and created a lot of work and disadvantage for us and more so the students is they did away with the, before I came, I started in 2018, they done away with physical readers [physical copies of teaching materials], I think because the SRC had demanded that because of the cost of readers to students but they don't have the printout readers, they can't make notes on them, they can't afford to print it out themselves. We provide all the readings online so they don't have to buy texts and stuff but yes, they can't, most of them just don't do the readings or can't and makes it very hard to engage with the readings and teach them effectively and it means you have to teach them readings as well as that... [P18, lecturer, 10–14 years in academia]*

#### 7.2.1.2.3. *Sub-theme 3: Teaching also involved providing on-the-job training to students*

Other participants indicated that part of their teaching role was to provide on-the-job training to students in the hospitals, which also further contributed to their high levels of NMHOs:

*... in [the] training [that] we do, it is not only the theoretical one on one in the lecture theatre kind of lecturing but there is a lot of practical work as well. And this entails taking students to hospitals and clinics in the communities and supervising them there. So, it is a very demanding, human, physical demanding, and mentally demanding job. [P22, associate professor]*

*... it is very, very demanding because it is not only about just the teaching. Your clinical and teaching programme it is very demanding because there is clinical and there is theory and they have to work with the person and turn them into a professional. So, that's quite demanding on its own. [P7, NGAP lecturer]*

#### 7.2.1.2.4. *Sub-theme 4: Online learning and teaching during the Covid-19 pandemic*

Teaching during the Covid-19 pandemic was also described by some of the participants as adding stress to their teaching work. The research participant P11 identified difficulties preparing/delivering effective classes online, reduced number of students attending online classes, and difficulties ensuring that students were engaged during the online class sessions, as some of the negative aspects of online teaching that increased her levels of teaching-related NMHOs:

*... it's just not the same as in a, what you call it, contact lecture, so I think the lack of contact lectures in Covid-19 is something that has changed the face of varsity teaching. ... for example, one lecture I had 55 students registered and at the end of the time nobody can see how many people are logged in, there were 12. [laughter], that's not very productive, let's put it that way. ... I tried that online, it doesn't work, so you don't even know whether they were completely bored with your lecture or they actually followed you or I think that that interaction isn't there. ... I don't know, I think we were really thrown in the deep end and to this day I haven't seen that the university has said, look here, this is an online training course for so-and-so, please watch that, you know. They say oh yes, Google classroom, you can click all that and then a video on how it works comes up. That's not what I mean, I mean that somebody says to me, okay ... this is how we can help you, you know or this is how you can divide your lecture if you have it online, because that's what I normally do when I see they [students] are getting a bit tired then you put some other aspects in or trying to get back to something or trying to do something that wakes them up. There is nothing that you have now. It's just like, if you're giving a talk exactly, and people get bored. I don't like the online lecturing as you can tell.*  
[P11, associate professor, aged 50+ years]

#### 7.2.1.2.5. *Sub-theme 5: Students' Representative Council's demands and students' strikes, result in lecturing programme disruptions and high levels of NMHOs*

Some of the research participants reported that the ongoing challenges to deal with SRC demands and students' strikes, had negative impacts on their resilience:

*When I am at my work I do my work, and try to be positive and energetic but if there is one thing that sometimes just upsets me ... makes me lose my patience with students, is when you hear there is another strike on its way. So, immediately you think about how am I going to fit in all the work that I am supposed to teach and sometimes you must re-teach so that makes me, I become a little bit impatient with the students because it is sometimes students in your class that is striking. They know what is the consequence of doing it but they still do it and I understand it is something we can talk about for ages; it is just those things that gets me down that we want to help and we want to teach and the students they just want to strike and they just want to get everything for free. [P13, associate professor, 5–9 years at UKZN]*

*Okay so the only negative thing is for me right now it is the student body because I just feel like perhaps, we have given in too much. So, there is just this sense that we owe it to them and I have seen it more than once because I am constantly in communication with the students ... It is demanding and there is no respect that is reciprocated and we try really hard to give them our best because that is why we are there; it is our primary purpose is to get the students well equipped to be competent healthcare professionals but I saw it last year a lot where the students come with this. I don't know if we have given too much, I feel that it is the demands and then a lot of the time I am bullied because I actually feel I don't have a choice because the student is not giving me, you know there is prerequisites, there is rules but I have to waiver everything because the students are not giving me the opportunity, the SRC is there, the family is there, the student is ... So, that is the only negative thing I can draw from, that puts me off a little bit because the last few years I have seen it more and more, this attitude of you owe me and I feel like I don't owe anybody anything. It is a mutual thing, there is supposed to be respect we are supposed to be team players but I don't feel like that sometimes. [P8, associate professor, 10–14 years at UKZN]*

7.2.1.2.6. *Sub-theme 6: Participants' compassion fatigue associated with students' consultations*

Several of the participants identified with the concept of compassion fatigue in the context of working in the academic environment. The responses from the participants indicated that compassion fatigue is likely to be experienced by those with teaching roles because they often show sympathy or empathy towards their students. This reality was elaborated by a lecturer and a tutor in the following examples:

*...I think if you are going to be an academic in Africa, the element of compassion is embedded in what you do... In a semester, let's say I am teaching a particular course, I am teaching entrepreneurship like I do. You are going to get a normal group of students coming to do consultations but there are going to be that small number of students who are going to start, they start monitoring your movements, they know that you leave at this time. They become too embarrassed to come during the set consultation times and you get to know this ... So, because they figured your movements, they know okay 'she' usually leaves the office at 7. So, they sneak in around 6 to come and consult because they want you to explain something in Zulu.... you are busy talking to them about organisations and they have never seen an organisation or what it looks like, they have never seen a big company what it looks like on inside. So, that example that was made [during the lecture] is completely lost on them. So, because they think that oh you speak Zulu, I speak Zulu, you probably know I am going to have better ways of explaining a particular theory in paradigm using their reality. So, that is pure compassion. You need to have compassion to do that. And as the numbers of people who ask for these [individual consultations] increases, it also really gets to you.... My whole experience of teaching I have experienced this, with every module I have taught... I have been here [at UKZN] for fifteen years, there is not a single semester where that has never happened let me, put it that way. [P4, lecturer, aged 40–44 years]*

*Okay well obviously, it [the most challenging part of job] had to be during students were coming in and they were having a lot of problems suddenly when*

*it happened before exams and tests. So normally for demonstration we would have anyone who would like assistance. Usually, they would come in and they would be consistent students. And now we have a whole influx of students coming in just before tests and exams saying they do not understand this and they do not understand that. So, they put a lot of pressure on me to cope with them and find out all their needs and help them pass their exams. So, it became very stressful with the different aspects, different areas of teaching which they required and that became stressful at time. [P14, tutor, 1–4 years at UKZN]*

### 7.2.1.3. Theme 3: Research Demands [Factors] Contributing to Participants' NMHOs

The vast majority of participants [23 of 27 or 85%] reported experiencing higher levels of NMHOs due to research workload demands.

#### 7.2.1.3.1. *Sub-theme 1: Participants physical health adverse outcomes due to research work-related NMHOs*

The participants responses suggest that academic workload demands such as research work had significant negative effects on the physiological state of the participants. A permanently employed lecturer participant, reported falling very ill due to very high research work demands and not having the support from colleagues:

*So, teaching has always been fun, research on the other hand, I love research but it got to a point where I got really sick because of the stress, I got from research. In my field, that is the field of neuroscience, I had to be in the lab, so that was quite demanding. I was working with animals and those require everyday attention. There are procedures that would take days to finish to complete, that would require your 100% focus. ... Well, I guess I had to accept it, I knew it [the support] wasn't there and the fact that that I was getting sick and because of all the stress I think that it might have contributed to the fact that I am working so hard and I am even putting my [research supervision] students before me... [P16, lecturer, doctorate degree]*

A senior research scientist participant, whose academic work at UKZN did not involve teaching but only working on research projects, related her increased research-related NMHOs and negative effects on her physical health. She discussed her experience where she was placed on a daily anti-depressant and anti-anxiety medication after being diagnosed with burnout:

*I think the only other challenges with work is that it is very easy to take on too much as an academic because there is lots of interesting projects out there and people are always looking for people to help out in projects and so every time a new project would come up, it would be, 'oh can you just be able to do this, oh can you just do a bit on this', and it is very easy for your workload to get out of control and that is something that I definitely experienced in late 2019. So I was signed off sick for two weeks with burnout basically and that was because the workload that I had got to a level of unmanageable that I couldn't get up in the morning. I was at a point where I wasn't taking the time and I wasn't able to invest the time in myself so that I could then do the work that I needed to do.... And some of that has got to do with workplace distress .... So, when I been diagnosed with burnout at the end of 2019, I had been put on a short course of anti-anxiety medication and then at the end of last year [2020], through a combination kind of borders of pressures of around COVID-19 and some stuff to do with relationships and work and all the other bits and bobs that all add up. Again, I went to the doctor and I was put on a short course of anti-anxiety medication along the course of anti-depressants. So, I am currently on anti-depressant which I take on a daily basis and it is a low dosage, and they have helped, they have helped a lot but again it is kind of recognising that whilst they are part of the solution there are lots of other things that I can do. So, it is actually making sure that I can turn my computer off at 4:30 or 5.00 pm. [P3, Fixed-term senior research scientist, 1–4 years at UKZN]*

7.2.1.3.2. *Sub-theme 2: The academia pressures of meeting the credentialing requirements*

A lecturer participant who had 2 small children also reported the difficulties experienced when she had to work on her PhDs while undertaking her academic roles and try to find work-life balance:

*I had a bit of a burnout after handing in my PhD because I felt so depleted. I just felt like my brain was empty. I reached a point where I would try to write an article and I just would stare at the screen and I had nothing to write. ... I worked so hard trying to get it done and I mean I used to wake up at half past one in the morning and write till six, six thirty whilst my kids were asleep.... And I did that specifically because I needed a quiet house to be able to do it. As a mum, you have to. And I think I went so many months without proper sleep and just writing and writing and I didn't realise it was burnout, I didn't, but one of the people that I know is a clinical psychologist and one of the days we were just talking, I was talking casually to her and I said hey this is what's happening. I am staring at the screen, I can't do anything, I just feel so tired and I just feel like I want to sleep. My kids are asking for stuff and I am just so out of it not feeling ... so she sent me this questionnaire thing and she said to me just fill this thing out, just don't think too hard about it, look at the question and just answer, don't think implications and all that just do it and send it to me. And I did that, and she said to me you have got mild depression and you are very much burnt out [laughs] ... She said you need to close off your computer, you need to close off everything, you need to just be home with your kids, you need to have a holiday, you need to ground yourself again, and believe it or not, I did that. I took leave, I filled in leave on the system. I shut down completely. My husband bought me ten rose plants, I started gardening. [P2, lecturer, mother of two]*

7.2.1.3.3. *Sub-theme 3: Publication units [PUs] and the key performance areas [KPs]*

The participants reported that the university placed too much emphasis on research workloads, while at the same time expecting academics to meet various high academic targets. A New Generation of Academics Programme [NGAP] lecturer spoke about how having to meet the

high work expectations/targets set by the university, acquiring her PhD degree and publishing research, potentially contributed to her high levels of NMHOs:

*... I find it difficult that UKZN is placing so much emphasis on quality teaching for the professional programmes but also expecting staff to be credentialing at the same time. And you are expected to have publications, you are expected to have your foot print there locally and internationally and that takes time, how do you do that when you are loaded with undergraduate teaching, with master's students plus your own credentialing. As a result, it becomes really draining. As I said I consider myself new and I have been asking my colleagues who have been doing this for more than ten years how do they do it, how do they cope?*  
[P7, NGAP lecturer, master's degree]

Echoing this, P4 explained her realisation that the evolution of academia and the value that is placed on research means more anxiety for academics to meet other academic targets set by the university:

*... the evolution in academia I am finding, so there has always been emphasis on research, what is happening and I think the area of what causes anxiety is now from what leadership management says and I suppose interacting with other scholars and all of that, you begin to realise I think after about ten years that lecturing is actually quite secondary to research and research is at the top or the core of your career as an academic.* [P4, lecturer, 15–19 years in academia/UKZN]

The participants related specific factors such as the changing HE institutional practices, whereby universities are increasingly presumed to operate more like a business of knowledge creation, as the main contributor to their increased research output pressures and NMHOs experiences, and thereby hindering their PU's productivity and KPAs targets.

*Okay, the research demands are mostly you know this productivity unit story; you know I am very slow. I won't deny it I am very slow but I am a bit of a perfectionist. So, I won't publish anything that I am not 100% happy with. And you see I get compared with other colleagues that produce papers and papers*

*of work that is completely irrelevant but they find a niche and they doing well. But you see that is never taken into account, so you feel like you are never good enough. I do my research, I am happy with what I am doing. I do a lot of commercial with the industry, work that eventually we have Masters students, PhD students, my research is working but it is just not up to the standards that they [the university] impose on us and that is very stressful. [P5, senior lecturer, doctorate degree]*

*... the structure itself is such that it's not built for people to cope and become comfortable. You are supposed to always feel anxious: "when's my next publication coming out?" "Am I going to meet my KPAs for this year and so on and so forth". So, that is an inbuilt anxiety that is supposed to, I think in somebody's theoretical mind, it is supposed to spur people to work harder and perform whatever. To my mind maybe for some who are already going to perform it might do that, I don't know but I think it also creates a very negative culture of people who come to doubt themselves and their abilities when they are unable to meet that so called magical target of you need to have published here, there and there. And so, the environment is not conducive for people to relax and to my mind when you can't relax and speak freely it stifles innovation, creativity. And so, people want to keep their creativity to themselves and not share it and in which in that way I think there would be some leaps and bounds and innovation. "It is mine I need to get the target, if you get the target that means I won't get the target". [P17, 5–9 years in academia/UKZN]*

Another factor the participants described as hindering their PU's productivity, meeting KPAs targets and research workloads demands, was that of the teaching workload formula set by the university. A few of the participants believed that the university's teaching workload formula did not reflect their current teaching demands reality. The experience shared by 2 of the participants below illustrates how the teaching role negatively impacted participants' ability to engage with research work and contributed to the participants' increased NMHOs:

*I think in terms of research sort of being a stressor, it is more the fact that I am not having the time to do the research, that there is this incredible pressure to*

*be publishing, to be doing the you know...yes, to be a researcher, and yet there is simply not the time. And there is just no acknowledgement of that. I mean we do these; we fill in these workload hour, teaching workloads. Teaching workload spread sheet where you have got to sort of say well you spent so many hours lecturing, so many hours doing preparation, so many hours doing marking etcetera. But nobody wants to know what you actually do. They just want you to fill in a formula and the formula sort of is pre-worked out. It is basically sort of, you have got X number of lectures which means you do X number of prep, you have got X number of students which means you do X amount of marking. And so, it is like  $20 \times 0.5$  and that then gives you your preparation hours or something. So, you have got no control over the formula. The formula doesn't actually reflect your reality in any meaningful way. I mean I think according to that formula you basically get something like an hour and a half per student, per semester. [P1, lecturer, doctorate degree]*

*... when we come to the UKZN teaching workload they are trying to make it equitable but it is not, because the formula that is being used works for certain programmes that have - if you are working with numbers it will work for you. For us we are clinical discipline so the formula for example, the amount of time allocated for assessment and contact time, the formula is there but it doesn't reflect the amount of time we spend on a student. Just a simple example, I teach first years and second years, these are like grade ones who come in knowing nothing about the profession, so by the end of the second year you need to have groomed them to be a health professional. So, that includes academic reasoning skills, that includes their writing abilities that improves their professional conduct. So, it means you spend a lot of time on an individual, yes the numbers might look small on paper but the amount of effort is different ... it is different to mark a first year's report to a fourth year's report because at first year you need to give in intensive input to guide them to that level. And that is your time where the formula says ah we will give you an hour or they will give you thirty minutes to allocate for marking when in actual fact you spend up to four or six hours marking for one student because you will mark the first draft you have to give an input, you mark the second draft, the third draft, sometimes*

*even the fourth draft before you can say now this report is ready to be taken out to the public because we work with human beings then need to be referred outside of the university. [P7, lecturer, 1–4 years at UKZN]*

The participants also related the fact that research work can be a lonely process in certain academic fields, which is exacerbated by the lack of collaborative research work among academics in those academic fields, and the increasing pressures for academics to speed up their PU's productivity.

*I think one thing with research just not at all unique to UKZN but generally and particularly in philosophy, research work is very isolated and we seldom do collaborative work. We don't do field studies and lab work. So, we are very much isolated in our offices and some people really have that and thrive on it, I don't particularly. I like working on my own thing but I would like more of a sort of social do that in a more social environment and that's really difficult. Also just the sort of harshness of the rejections and critiques in trying to get published is, it is really tough and particular philosophy and analytical philosophy particularly like some subjects there are fewer people like us, the top and even you know fairly far down the list they have tiny rates of publication, something like 6% or something and it is very, it is not a sort of collaborative or supportive culture in philosophy. So, it is very critical and harsh, and I think that's tough and it just takes a toll and it is within the whole context of the increasing demand for publication and as the universities generally run more like businesses and then they have to increase output which it is like research and that gets us money from government and it gets us research funds. So, there is just the push to publish, quality is a secondary concern and there is not at all a concern whether you have anything important to say or whether it is valuable and it just sort of creates a deluge of articles that are chopped up as small as possible and you can publish as many as possible... [P18, lecturer, 10–14 years in academia]*

An associate professor participant, who had been working for UKZN between 10–14 years elucidated this concept of PUs further. She described the increasing motivation behind having

a positive PUs status as an academic staff member at UKZN, which adds to the pressures FAs experience in terms of working longer hours, in the following way:

*So, generally all academics at the university if you publish papers, chapters in books, graduate students, conferences, presenting work and so on. So, it is basically outputs. So, you get points for your outputs. So, I will give an example so if you publish a research paper and it has to be an accredited journal.... So, what I do is, say I publish an article, you get 60 productivity units for one article.... The corporates love to say we work hard; you'll work 8 to 5. You'll sleep till 10 o'clock, which yes we can do but we [academics] are in research, thinking, teaching, you're [academics] sitting 10 o'clock at night and working when they [corporates] are totally switched off. [P10, associate professor]*

#### 7.2.1.4. Theme 4: Administrative and Skewed Workloads [Factors] Contributing to Participants' NMHOs

The vast majority of participants [22 of 27 or 81%] reported experiencing higher levels of NMHOs due to increased administrative demands and skewed workloads.

##### 7.2.1.4.1. *Sub-theme 1: Lack of teaching assistants [tutors] and increased administrative/skewed workloads*

Several of the participants underscored the positive influence of having teaching assistants or tutors in sustaining the participants' positive levels of resilience. In other words, the participants emphasised that having teaching assistants or tutors would help them reduce their higher levels of NMHOs associated monotonous teaching administrative workloads. The following extracts illustrate how the lack of teaching assistants or tutors has had a negative impact on the work of some of the participants:

*I have absolutely no administrative assistance at all and I haven't had for a long time, for a period of about a year or two I shared an admin assistant with a colleague and it was so helpful, but I have absolutely no administrative assistance anymore. So, if I run a workshop, I have got to do the advertising, I have got to answer all student enquiries. If I want to book a flight or do anything I have got to do all of that stuff and everybody says oh everybody has to do that*

*anyway but it is not like that. Heads of Department have got people who do that and they don't share them. So, I do find that admin work takes your mind off the work that you are thinking about. So, if I have got an admin day I don't do anything for my students because it is all just this rote admin stuff that you don't even need a mind for and to me it is such a waste, but it is one of those things that I have had to learn to accept. [P12, associate professor, 10–14 years at UKZN]*

*So, I mean in terms of running a first-year module, we usually try and have tutors so that the students have some small group of contact. Year in and year out we are still emailing school management in March to find out can we appoint our tutors. Guaranteed, I don't have tutors appointed until at least a month into the semester. That is just part of the course. And I see other Schools are advertising for tutors in October or November of the previous year and it is why is it that in March we are still being told we don't know what the budget is or we don't know what we can...so then you got the responsibility of someone else who you have now said yes, I want you to work, I want you to be available to tutor and to assist with this module. I don't know how much I can pay you. I don't know when you will get paid; I don't even know when you will get appointed. But you know come, come, you know come do this work. [P1, lecturer, 15–19 years at UKZN]*

7.2.1.4.2. *Sub-theme 2: Additional time consuming [unproductive] administrative/skewed workloads*

The research participants also spoke about a number of a time-consuming activities affecting the ability to fulfil other responsibilities such as administration tasks and PhD work. Attending to many work-related emails, preparing online learning materials on/for the Moodle system, keeping up with supervision work of postgraduate students, and providing administrative assistance to other senior academics, represented some the other forms of administrative and skewed workloads which increased participants' experiences of NMHOs.

Research participants P7 and P13, respectively, exposed ongoing NMHOs associated with attending increased loads of work-related emails:

*...the university has administrative staff but we ended up doing the admin for them because for example you have to do the marking, you have to put it on an Excel then you have to send it to the TAO to load it on to the SMS system, that is still admin. Ideally the academic just needs to mark the scripts and then the TAO's take the rest and then we also expected during COVID we had to come up with infection controls policies on how to deal with this COVID, that was additional administrative tasks that were not there and as a result it piled up on your workload, and now also your PhD took a burner.... It is not a life and as a result I have made the decision that I am not going to stay in academia for too long, as a result I will have Alzheimer's by the time I am finished with academia because there is no end, it is just continuous rat race. You are on leave, you're still checking emails, what kind of leave is that? You get an SMS, a WhatsApp call from your leader saying please quickly look at this email and send me back, I need this information. For goodness sake, I am on leave. You are not on leave; you are just on a break and those are things that get you fatigued and exhausted and burnt out and angry and unfortunately with these devices following us everywhere.... My friend's birthday party was on Sunday and we were at the restaurant, what was I doing? I was clearing my inbox, I was reading my emails when people were looking and laughing around me. Somebody actually took my cell phone and switched it off. They said we need you here, we are in a birthday party. You find yourself you can no longer stop because we say 'okay if I can go through, if I can clear my inbox that will decrease my anxiety; when I get home then I don't have to deal with emails', but you are at a party! So, those are things we find ourselves doing. [P7, NGAP lecturer, master's degree]*

*You attend to a lot of emails hey. I am telling you. I will say most of my work is just responding to emails, helping people, sharing information whether it is my students or whether it is within my profession or whether it is for my colleagues, yes that keeps you busy a lot. I spend a lot of time with that.*

*Obviously, I work at the practice eight hours a week. I really can't do more, fortunately university only allows me to work eight hours otherwise I wouldn't be able to get to everything. I also attend a lot of meetings like on Monday I had a meeting starting at 9 finishing at 2. Sometimes our meeting starts at 8 finishing at 5, half past 5. [P13, associate professor]*

Other participants reported finding the online Moodle system time-consuming and dysfunctional when it came to administrative tasks:

*... It [my work] is made worse by there are a lot of dysfunctional processes. Administratively, things that are just, you get around in loops or you find there is nobody who knows what is really going on, how to do it. The teaching software or the learning management system is very, waste a huge amount of time by making certain things impossible, by making somethings take a lot of time and complexity to do which should be relatively simple. So ja, I do spend a lot of time battling with Moodle, which I guess is admin. Trying to get readings online and make quizzes that's been a lot more not being able to do it in the classroom. That's been a ton more work. [P18, lecturer, doctorate degree]*

Participant P1, further highlighted the issue of administrative and paperwork that many academics might experience when supervising postgraduate students:

*Also, within the whole, within teaching and with administration is also you know the admin around supervision. And so, with your Masters and PhD students, the amount of admin and paperwork that you are dealing with is huge. And trying make sure that you keeping with it and a lot of the time you know it is not such that you even access it. [P1, lecturer, doctorate degree]*

Another insight into the issues around administrative and skewed workload demands came from participant P14, who was a PhD student, employed on a temporary basis as a tutor. She felt that the role of a student teaching assistant becomes more onerous because other people will tend to immediately delegated their own administrative workloads to tutors. Nevertheless,

she felt that the additional work delegated to her also had a positive influence to her KSAs levels.

*I think usually any admin from any work would be challenging and generally with our supervisors and our post-doctoral student when they see that a certain student for example post-graduate student has certain level of expertise and certain level of skill - that responsibility and admin work automatically becomes theirs. So unfortunately, it is not like we can say we have our own work to do but at the same time it helps us grow and helps us take on more responsibility. So, I am learning at the same time although it does become very stressful and it is not exactly my work to do but I have learnt to do things. [P14, tutor, aged 18–24 years, master’s degree]*

#### 7.2.1.5. Theme 5: Knowledge, Skill, and Ability [KSAs] [Factors] Contributing to Participants’ NMHOs

Ten of the 27 participants [37%] reported experiencing higher levels of NMHOs due to work-KSAs-related issues.

##### 7.2.1.5.1. *Sub-theme 1: Lacking teaching KSAs and the need for more experience through training*

Overall, there was a sense of perceived positive levels of KSAs among the majority of participants with regard to undertaking their work-related roles. However, it appeared that those who reported high levels of NMHOs due to KSAs were participants who had been working as academics for only a few years, indicating that more support was needed to increase the level of KSAs that the participants needed to cope with the demands of the job.

*Let us talk about the teaching demand, as I have indicated in my background that I am from a clinical background. So, I was working in a government setting. And when in I was handed modules that basically expected to teach without knowing how to teach and yes, the university provided the UIEP programme for induction to lecturers but the biggest challenges are you first must figure out how to deliver this content and now with COVID-19 it made it*

worse, we are content programme with a lot of clinical. [P7, 2–4 years in academia]

*For me I think that is most challenging is the teaching demands. ... let's say for example ... because I've been doing teaching a year so I don't know, because for someone who may have done it last year they just duplicate their materials, switch it here and there but for me, because I was starting to create my own material and figure out how to go about my own work. ... I think mainly because of the subject that I had to teach, the module that I had to teach, right. So, it was engineering materials, it is something that I really never, when I was studying, we never built on it, right, it is a first year module so I had to re-teach myself most of the concepts ... to remember from scratch most of the things because I never really expanded on the module even when I was studying, I had to really go into depth. Learn through YouTube, learn through whatever material I can find to even identify the material that is relevant for the students as well, so that was the difficult part for me where ... I had to break it down for myself first so that is where the difficulty came about. [P15, NGAP lecturer, 1 year at UKZN]*

#### 7.2.1.5.2. *Sub-theme 2: Teaching junior versus students senior and the importance of prior teaching training*

Participant P21 also reflected on the fact that the teaching of mature or adult students can be more demanding because of the higher degree of KSAs required. She related her experiences where the sudden allocation of teaching roles to post-doctoral students may heighten stress levels.

*... before, when I was there [working for UKZN] previously, as I said we were pulled into a lot of lecturing at the last minute, so that was a bit stressful because you know when you're not a fully developed academic, should I say, you need time to prepare, time to construct your power points, even time to just increase your knowledge around the subject because you are not like a senior academic 'this is already in your head'. So, the part that was a bit stressful was being pulled into lecturers at the last minute and having to prepare, and our audience*

*are grown adults so you can't just go there and say anything, you have to have a strong understanding of what you are teaching...* [P21, fixed-term lecturer, 1–4 at UKZN]

The prominence of undergoing formal training to develop the key teaching KSAs required for the lecturing positions was emphasised by P6. She pointed out that the academic teaching role can lead to NMHOs due to the general held assumption that a person is well-prepared to teach, once they obtain a Master's or a PhD qualification:

*... I will draw again from my experience. There is this weird assumption that okay you have studied; you have been trained. So, it is like someone forgets. So, when you are at undergraduate, you're not a lecturer, an undergrad, you're a student you are being trained. You get to honours, you get to masters, you get to PhD you are still being trained, but there is this thinking that once you have a PhD or you have that master's if they choose to employ you with their masters you can teach. Who taught you, who taught you how teach? Who taught you about the theories, about the pedagogies, who taught you? Nobody did, but they employ you and they say go teach, some goes as far as when they're interviewing you, they say prepare a presentation on how you teach. Now, someone who has just finished their PhD never taught in their life, how are they supposed to do that? They can't. You don't know the philosophies that are around, these things you swim in the sea and you just bump into them and then you collect and you say I need this one, I need that one. If you are a person who then wants to grow, then you would go as far as how I do? and I Google and say teaching methodologies and teaching because you want to understand it. Those in education have been trained deep in these things but for someone who was trained as an anatomist, I am an anatomist, you can give me a body I can close my eyes and dissect it. But don't think I can move from being an anatomist and now just be a teacher of human anatomy. Don't make that mistake.* [P6, senior lecturer, 5–9 years at UKZN]

7.2.1.5.3. *Sub-theme 3: Negative collegial atmosphere and the lack of KSAS mentorship support and collaborative teamwork*

The participants highlighted the fact that the work environment itself and the people that they interact with in that environment can be discouraging and have a detrimental influence upon their KSAs and self-efficacy beliefs. They also attributed their current experiences of NMHOs to the lower level of collegiality and collaborative relationships in the workplace.

*... Where I have a problem is when I depend on my colleagues to improve things. For example, I have colleagues who are very set in their ways of thinking, they are not interested in modernising, improving, and there is all this talk about decolonising curriculum. I believe that our field, any field of science is a dynamic field and we should improve with time, we should make things more appropriate, more current and it is very, very hard when your opinions and your suggestions are completely dismissed... Yes, I mean, I believe in some aspects like I told you I believe in my abilities, I believe in being hard worker, I believe in my skills, knowledge. But sometimes you know the negativity around you makes you doubt a little bit about your capabilities. [P5, senior lecturer, 15–19 years in academia]*

In another example of the lack of the KSAs/mentorship support from colleagues, research participant P19 made specific reference to the view that FAs tend to be pushed to prove themselves, especially if they are perceived to be too young for certain roles or ranks in academia:

*... I entered academia when I was 26, and there was this old school of thought it was the old guard that you needed to prove yourself, that you only become a professor when you fifty or when you are you sixty. So, in my discipline we had the first professor in our discipline when she was a year from retirement. So, she got promoted to professor, got her PhD and then retired. And I vowed that I would never be one of those that would sit ... that I would not be one of those academics that remain stagnant but really push the boundaries to get there. So, I sought mentorship, the first paper I wrote, academic paper I wrote, I threw myself in the deep end, I wrote a paper and I asked for a couple of my*

*colleagues, obviously seniors to critique it. I was told that it was too early to start writing, I asked co-author work with individuals but no one had the sense to trust that this is the direction I wanted to take. And I am sharing this because currently those are the things that drive me to the younger or the new generation of academic come through do not face the same challenge because if I am honest, the motivation that I had coming into academia this is not being pompous. If I had someone take me under their wing and mentor me I would have reached some of those milestones a lot quicker because I would have the support and so what I do right now, I convert that energy that negative thought of my experience into making sure that I then am a mentor not on paper but a true mentor to the next generation. [P19, associate professor, aged 40–44 years]*

This was also echoed by research participant P26, in her reflections about feeling unsupported by her line manager when she felt she needed to apply for a professorial rank in her department:

*Well, you see for me, the one thing that my line manager said to me was when I wanted to apply for a promotion, he specifically said to me, the one thing that was against me was my age. And he said like ‘why do you want to get promoted now when you are forty years old? Why do you want to be a professor when you are forty? You can wait two more years, even if you are a professor at forty-two it is fine’. It wasn’t like because you are young you can apply now. But who says that everybody who has to be professors has to be older? Because he specifically said to me that my age was against me. [P26, associate professor, aged 40–44 years]*

In addition, the data also suggests that a few participants experienced high levels of NMHOs because they felt like they were on the receiving end of racial discrimination/intolerance as academics at the university. The issue of negative perceptions surrounding younger and Black FAs levels of KSAs, that might contribute to high NMHOs for Black FAs, was highlighted by participant P7:

*I want to make it explicit that when you are Black and you are female and you are under forty, in UKZN, you have it hard because you are a threat. People feel that you are a B-BBEE [Broad-Based Black Economic Empowerment] or*

*an affirmative action appointee so you don't have the skills, the knowledge and the attributes and you have to work triply hard to prove yourself. And what I find frustrating from my White and Indian colleagues is that they deliberately sabotage you to make you look incompetent. [P7, Black, NGAP lecturer, aged 35–39]*

These extracts illustrate the strong alignment that professional/personal networking and coaching/mentoring support might have to FAs' sense of self-efficacy and resilience.

#### 7.2.1.6. Theme 6: Professional and Personal Networking [Factors] Contributing to Participants' NMHOs

Fourteen of the 27 participants [52%] reported experiencing higher levels of NMHOs due to professional and personal networking issues.

##### 7.2.1.6.1. *Sub-theme 1: Experiences/perceptions of victimisation, stigmatisation and bullying at work*

The participants reported that forming positive alliances and networks on a professional and personal level with various individuals within the university and academia in general, played a fundamentally important role in shaping their identities as academics, which in turn resulted in increased positive satisfaction and motivation at work. The responses revealed that some of the participants, experienced NMHOs due to feeling victimised, stigmatised, or bullied when it came to interactions with specific individuals at the university. The experiences/views of three participants are illustrated in the following extracts:

*Historically, we are coming from a department that was dominated, I call it the old guard, but by thoughts and perceptions and understandings that were influenced from an apartheid era that they are superior in 'there are superior individuals and there are less superior individuals' and I have had many encounters and I probably think there are three encounters in my early career where I was told that you are just Indian and you won't understand or I had a parent of a kid who I was assessing within our university clinic, be a bit a verbally abusive and the head of department said 'you won't understand, he*

*doesn't understand that you come from the other sides of the tracks'. That line just remained with me. So, it was those early experiences, not only me experiencing it but other colleagues and I want to be honest and I hate to always be, bring race and colour into conversations but sadly in this particular instance our particular discipline has been haunted by some of those actions and behaviours that occurred. [P19, Indian, 10–14 years at UKZN]*

*I started off in the department as a PhD student, some of my colleagues were also doing their PhDs, some of them were academic development lecturers. And I was new in the department so I went from medical microbiology to physiology. So, it was a huge jump, physiology as in the neuroscience group and I am not sure if my colleagues were not happy about this but I have even heard, well this is just something that I have heard from other colleagues, that when I became lecturer, people were shocked. There were other better candidates that could have gotten the jobs and people were just hostile when I started and I could feel it and I heard that people said we would not help her. And I just wondered what I did, I didn't do anything to have them feel that way but they just thought they were better candidates among the people who were in the department that could have taken up this job, but I didn't hire myself, I went through the [hiring] process like everyone else. I went to my interview, I applied and yes, as much as there were other people who even had PhDs who applied for the job, I got it and I attracted a whole lot of hostility because of that and it took a while, people were openly saying that I don't deserve it. It took a while. I am not sure whether that was something else or it had to do with their stress levels. [P16, aged 35–39, 2 years in academia]*

*The workplace is not a nice place. I have seen, I have worked in industry, it was really not nice. You find, so for me I think especially with the mentor who is working with me, she's really helped me to also bring that because I think at first I had the level of, you know I'm still, this is new, new, new and it seems like a new area. There will be a level of [rudeness from people at work], you know, but I realised it's all about and finding a way out, it seems so, luckily the NGAP provided someone to help us swim, to keep our head up above the water so I*

*really had no expectations neither do I have high expectation.... I do deal with depression every now and then. I do find myself having to navigate through that... Yes, and that is the main issue. [P15, 2 years in academia, master's degree]*

Furthermore, the participants also related stories that suggest that being employed on a temporary or fixed-term basis could put FAs at a higher risk of experiencing high levels of NMHOs due to hostility from colleagues or superiors at work. Participant P23 described how her negative experience with her male cluster leader at work took much of her headspace energy highlighting that her ability to work on her PhD was reduced as a result:

*... at the end of the day, you feel, you know, what is this all for, you know, what am I working for, you know. Like, there was no silver lining, you know, sometimes, you know, you go through all of this, and you're like, okay, there's a silver lining here, and there wasn't, you know. So, I would say, you know, the stress was, was very, you know, you have to do all this work. So, it's very stressful. And then another thing is, like, during that one year, during 2018, I didn't do any PhD work at all, you know, so it was a waste of one year. It felt like I wasted that one year on something that didn't get me anywhere. So, in 2017, I completed my proposal, and it was approved in 2018. But that's all. I didn't do anything, I didn't do any, any chapters at all, you know, and so it affected my PhD work, you know. And, to a greater extent, because at the end of the day, if you feel tired, you feel drained, you don't have any energy to work, you know. ... I used to just go in to teach and full consultation and the rest of the time, I came back home because you didn't provide a space for me or a conducive space where students were able to, you know, freely talk to me, you know, and, you know, in such a threatening environment, you know, you don't know whether, you know, the cluster leader anytime can come up to you and badmouth you, you know, and, yeah. So, it's like, psychological warfare, almost, you know, that, you know, you have to come in and, yeah, the only thing you could do is come in and try to do the best job you can do and, you know, and not being, not being seen... [P23, master's degree, temporary contract lecturer]*

7.2.1.6.2. *Sub-theme 2: Possible link between the hostile and negative behaviour of other people at work and compassion fatigue*

As the issue of hostile attitudes at work was common among the participants, it became important to gain participants' interpretations of the possible/potential causes of/or reasons for the antipathy that they reported experiencing from specific individuals at the university. Two participants reflected on whether their unfriendly colleagues could have been experiencing high levels work-related NMHOs themselves, which could have resulted in their hostile behaviour:

*To an extent [they might have been experiencing NMHOs] but...I don't know, when it comes to compassion fatigue, I feel that whatever is going on with a person it should not really affect how they interact with other people. Some of my colleagues when I first joined the department, and I am not sure if I can ascribe that to stress or whatever but I feel that there is no excuse for not - what can I say for - not treating somebody with respect and compassion regardless of what you going through. But it does to a certain extent affect how you work and the anxiety. It is related to some of the demands of the job. But regardless, as I said it doesn't, it is no excuse for treating somebody with, or just disregarding somebody. It is no excuse. [P16, lecturer, 1-4 years at UKZN]*

A post-doctoral researcher participant, who worked as an *ad-hoc* lecturer, also described how difficult it was for her to deal with that situation:

*Yes, I like that you put a term to it and that you called it compassion fatigue because I didn't even know such a term existed, but it was really that. It was coming down to the sense that all these things were requested from me, and I am by nature a very helpful person and also I like to keep the peace wherever I go, I am not a person who creates conflict. So, for me it was very much about where do I draw the line in helping this person [my post-doctoral research host/supervisor] but also protecting who I am as a person and ensuring that I have peace of mind. So yeah, it was a very stressful and anxious time because there are certain people that you interacted with and you can see that if you speak to them they will listen and they will make amendments to their behaviour*

*in order to protect the relationship, but there are other people and I'm not sure if this is for everybody, but you get a vibe when you are with a person as to whether they are open to discussion and whether they are open to change and it seemed like that was not being displayed by him. So, for me that was also anxiety provoking because I knew that even if I did talk to him - which would have been productive in a normal situation where dealing with a person like this – it would not have produced any positive results, if you can understand what I am saying. [P21, fixed-term lecturer, doctorate degree]*

#### 7.2.1.7. Theme 7: Coaching Support [Factors] Contributing to Participants' NMHOs

Thirteen of the 27 participants [48%] reported experiencing higher levels of NMHOs due to coaching support issues.

##### 7.2.1.7.1. *Sub-theme 1: Female academics' self-coaching initiatives*

The participants highlighted serious deficits in coaching support from the university that aimed to help them attain career goals within the university, or complete certain work-related tasks. Many of the participants indicated that it was important not to give up and succumb to the feeling of discouragement and helplessness when they felt there was not enough coaching support available. In the following examples, three of the participants articulate some of the instances where they acted on their own initiative and self-coached themselves, and/or sought support outside their work departments because they could not get it from people in their own departments:

*... so what I did is because I wasn't getting it [the support] from my own line manager I went to other senior. A good example is when I was applying for promotion, my line manager could not assist me at all. Even with reviewing my documents properly. I had to go and find another associate professor from a completely different faculty. I made an appointment with her and I sat down with her and I asked her to please help me draft my promotions application. ... and I knew she went through the whole process so she would be able to give me pointers. So, I had to go and look for help. Help wasn't being offered to me. There wasn't like you want to apply for promotion, tell me when you want to*

*meet we can sit, we can see your documents, nothing of the sort. Nothing.... It would have been helpful because then I wouldn't have been going to other people and because I mean the person that knows your performance better than yourself is your line manager because you are having performance meetings. And if that person can't assist you on that level, what use are you as a line manager, then you rather just manage yourself. [P26, 1-4 years at UKZN]*

*Yes, you know with coaching and mentoring support it has been, I don't know what word to use there. It has been there even prior to these lockdowns but you know it was more self-initiated and after taking time to identify who is good at what, if you take it back to the time that I returned in 2012, so I had to take time to see who is good at what and who can I draw from what. So mostly at that time I would say the mentoring role, my supervisor used to say he is playing that role because he felt supervision is both supervise and you mentor. So, he would call us in for these long meetings we talk and talk and those were his mentoring sessions. [P6, senior lecturer, 5-9 years at UKZN]*

*... They [the colleagues who were hostile to me] just excluded me in everything ... At the end of the day I did confront them about it and when I would tell my supervisor it sounded like I was complaining and whining so I just had to figure things out myself and not involve my supervisor, and some of the hostility that I was facing I just at some point I just had to put it out there, deal with it, the best way I can deal with it and the best way was to not rely on anyone but get my own help. That meant sometimes paying more money for resources that I could have had other colleagues helping with. ... when I was telling them how I was treated and they said to me but that helped you do better, you got to learn the skills that you learnt. And my answer to that was I would have still learnt the skills that I learnt with their help. I still would have learnt but I would have had their help. I would have really appreciated their help but I just didn't get it ... to my face they smiled but they would never make themselves available, if I send [them] a message that I see that in their paper I see that they have done this, can they help me out with it, I would just get blue ticked. So I just had to get over it and do it myself and get other people to help who were not my colleagues*

*but it would have been much better, the stress and anxiety it wouldn't have been much [less] if I had received support and help from my colleagues and what I was telling the other colleague who said I, because of how they treated me I would have learned it but that what that experience taught me is just see what I don't want to be like and make a conscious decision to not be like that ever to anyone. [P16, lecturer]*

7.2.1.7.2. *Sub-theme 2: More coaching support for the younger [and Black] academic staff than tenured/senior academics*

A few of the more tenured/senior academic participants spoke about feeling excluded from coaching support that was available at the university. Some of the White and Indian participants reluctantly shared their experiences and views around issues of race, associated with lack of coaching and mentorship support from the university. There was a strong sense from participants that the university provided more support to the younger Black FAs than FAs from other race groups.

Research participant P1 narrated her experience of feeling unsupported:

*In the sense that...and it's one of those things where I am sort of hesitant in raising it because I am like, well I am not quite sure whether it's a problem or not. I don't necessarily think it is a problem but I think it is a reality in that I think particularly within our Schools it does appear that our younger Black academic women they do get more support. They do get more coaching; they do get more mentorship. There does seem to be more support. Again, it might just be a matter of perception, it might just be a matter of geography. It might just be that they are based in Durban, and Management is in Durban so you know it is just easier to...but yes. [P1, White, lecturer, aged 40–44 years]*

It further emerged that the university transformational agenda such as the B-BBEE strategy has also been one of the main reasons why not all academics within a school may receive coaching and mentoring support. On the other hand, the usefulness of less-experienced staff appointees was also questioned by a few of the senior academic participants. The participants discussed the issue of KSAs and the experience of younger B-BBEE academics which contributed to

senior academics' heavier teaching workloads and NMHOs experienced. Participant P10 explains this issue in her own following example:

*... we have got lots of new young staff in. Because you know as the university changes as well, a minimum requirement is, you know, masters. So, and again it is demographics and so on. So sometimes that can, you know, not have the strongest candidate in because they want somebody that is, I am going to be honest with you, you know how the university employment system works, Black and going down - then Black, Coloured, Indian, White. So you can get somebody who is just, I mean I have got two of my graduates in who came in with masters and yet there were better people with PhD and years of experience that won't get employed and now at the moment I am having problems with one of the staff members where students complain about them you know, they are not experienced, they don't know enough because I mean it is somebody who just got their masters and now you're making them a lecturer with no proper training. Yes, the university has some of those workshops and courses and so on but you still need some experience you know because you are coming in bang in, you're a lecturer you got a heavy workload. The person themselves is drowning because they still have to do a PhD and they have to lecture. So, it is quite a bit. So, as I said there were challenges before that but this has made more the student and the teaching side a lot more challenging. [P10, Indian, associate professor, 10–14 years at UKZN]*

#### 7.2.1.8. Theme 8: Mentoring Support [Factors] Contributing to Participants' NMHOs

Fourteen of the 27 participants [52%] reported experiencing higher levels of NMHOs due to mentoring support issues.

##### 7.2.1.8.1. *Sub-theme 1: Female academics' self-mentoring initiatives*

When speaking about the range of challenges that participants encountered regarding mentoring support, the participants used similar words to describe their coaching-related experiences. They stated that they also had to largely rely on their own self-mentoring initiatives to shape their academic career identities. This included engaging in personal efforts

to develop the necessary academic credentials, work-related KSAs, and resilience to thrive on different adverse work situations which reflected apartheid era challenges.

Research participant P19 reflected this challenge in her response:

*I came into academia working with individuals with the same kind of attitude [of superiority]. I was never mentored, I was never supported, as I told you I came in as a tutor, I was stopped from pursuing, I was in post graduate studies before I entered academia. I was asked to stop [when I entered academia], seize my studies until the older fold could credential and then I would be able to go ahead and credential. So, I am coming from that era [which is associated with apartheid era] of not having mentorship or coaching or support. [P19, Indian, associate professor, aged 40–44 years, 10–14 years at UKZN]*

#### 7.2.1.8.2. *Sub-theme 2: Female academics and work-life-balance issues*

The lack of early mentorship support for junior academics was found to be an important cause of NMHOs for participants. The responses suggested that the participants' levels of work-related NMHOs might be intensified by persistent lack of career direction and support, pressures to meet new academic credential requirements for career progress, and trying to accommodate their home front responsibilities as mothers and wives.

Research participant P24 provides a personal example of this work-life balance challenge in her response:

*.... So, at that stage [of being a junior lecturer, then associate lecturer, then being promoted to lecturer] there wasn't any sort of direct mentoring of young academics, you just came in, you were dished out a work load and you just swam and it was an idea of sink or swim situation and I just pushed myself along watching the role models of other people or aspiring to other senior academics and just pushed myself along. So, I found myself in about 2007/2008 after my masters I found myself thinking I have to be very serious about where I want to go as an academic and I have been in the department for a few years and it is important for me to have some direction. But I grappled with that because there was very little mentorship, very little support, and the support that I did have*

*when I first started, the staff member that had recruited me to the university had left to another university. So, I felt that I was really struggling and I was really if I can use the word a solitary, where you just had to find yourself on your own; and so, by personality I am someone that just takes on a challenge and just keep pushing myself forward because of the family background I come from, I come from a family of academics and everyone has persevered and we are... four siblings, three of us are women and I have a brother and my dad was an educator as well. So, in our family circle you don't shy away from challenges and whatever is placed in front of you, you take in on and move forward. But... when you become a mom and you're now part of a family circle where you are nurturing young kids and you are a wife, your plate gets full and your demands are much more and then you start to realise that where you could previously manage all the challenges and being directed in different places without mentorship you can start to struggle. So, and as we went on in the year's I was still at a lecturer level, I registered for my PhD in 2010 actually and I still haven't finished simply because of a lack of support. [P24, lecturer, 15–19 years at UKZN, mother of two]*

*I would absolutely agree that there is a link because the minute the demands of your job start feeling that they can't fit into a normal work week, the immediate reaction to it is stress and anxiety about am I going to get all this done, when am I going to get it all done, it starts impacting on your social and your family time, I can't do that, I have got to meet this deadline and it makes it harder to get along with your colleagues because everybody is pushed for time, and we see this happening at very key stages in a normal year. [P9, senior lecturer, no children]*

In addition, other participants also reflected on academic fields or professions that were male dominated and discouraged women to pursuing an academic career in that field. Participant P11 response illuminates how, for some women, this may mean not pursuing an academic career in agriculture, to become mothers and have a family:

*Other stumbling blocks is, you know I'm in agriculture and agriculture is, sorry to say, still at this stage a very male dominated profession. Horticulture, maybe not as much but if I look, we have a floor here where I am in this building and there are five academics, six academics in my particular discipline and there are six academics on the other side and I am the only female. That shows you something you know. I have had PhD students and Master students, lots of Master students who are female but from the PhD there are not so many. I think people find the career is difficult or don't know where it's going or suddenly realise it's late in life, you've got a PhD and you still haven't got a family, you've got to get going, you know because that biological clock is ticking. [P11, mother of two, 20+ years in academia]*

7.2.1.8.3. *Sub-theme 3: Insourcing coaching and mentoring support initiatives can support resilience*

In relation to the need to establish more formal systems of coaching and mentoring, it was also evident that some participants had substantial academic experience in their fields, KSAs and willingness to coach and mentor less experienced FAs.

*So, there is mentorship wherever. I can just reach out and when it is time I can just draw on the different individuals in my life for mentorship but I strongly believe now that I am in a position of leadership and in a position where I need to impart, so I need to take on that strong role of mentorship. I have organically taken the mentorship of some colleagues, mostly Black academics, females who are juggling family life, juggling relationships, juggling success at the workplace. So, we organically just, they just radiate around me and I have taken them on and I mentor them. I have had writing retreats with them just personal outings, day outs to just chat. And I have a new Dean now who knows my heart very well and we are good colleagues. So, he has now recruited me and if there is anyone in the system female juggling a family who feels is kind of stagnant so he has given them to me to as official mentees so I am busy with a mentorship programme with them. [P8, associate professor, mother of three]*

The significance of establishing formal mentoring and coaching support systems that can foster FAs' resilience at work, is illustrated in the following extracts where research participant P10 highlights the direct impact that newer and less experienced academics can have on existing academics, and research participant P20 praised her former colleague for providing her with mentoring support earlier in her academic career:

*I think as the years have gone by, they have become a lot more stringent now, they are a lot stricter with the criteria. So, if you noticed lots of the newer employees coming in now are following the university policy in order to increase more Black academics. I am not saying there is anything wrong with that but again there needs to be a proper mentoring system in place if you want to get somebody that's young with no experience because it puts pressure on everybody else that's in the system. Because we have some good academics as well but there are others that are struggling themselves. [P10, associate professor, aged 40–44 years]*

*... I think that's where resilience comes in a lot now because you start thinking that okay, so you come in, you think that you get all those nice aspects where there's good networking, there's good relationships where you know you feel supported by your colleagues and you know the system itself so I think those elements [coaching and mentoring support, personal and professional networking] are very important because they can help you, it builds that perseverance and resilience over time but in a place now, in my instance where I'm in an environment where, for me to have even gotten in, it was one colleague who actually did mentor me and was such a, even till now, they are still consistent and we still have a good relationship so if it wasn't for that one person who actually took that role of that good mentoring, sharing resources and showing how the system works and even where the university fits in, I think if we had more of people like this person, it would have changed my mind-set, even my mental focus in terms of how I feel but yes. [P20, fixed-term contract lecturer, 1–4 years at UKZN]*

### 7.2.1.9. Theme 9: Compensation & Rewards [Factors] Contributing to Participants' NMHOs

The majority of the research participants [18 of 27 or 67%] reported experiencing higher levels of NMHOs due to compensation & rewards concerns.

#### 7.2.1.9.1. *Sub-theme 1: Financial/extrinsic rewards of fixed-term and temporary contract participants*

Compensation and rewards were identified as an important part of participants' extrinsic motivation which contributed to positive self-identity as academics and sense of self-worth. Overall, the research participants employed on a fixed-term or temporary contract basis appeared to be more dissatisfied with their work compensation and rewards than permanently employed participants, as illustrated in the following extracts:

*... so all I am saying about the permanent [academic posts] is that besides the benefit that I am looking for you know and the permanent will provide stability and as I said benefits that can help me take breaks so I am not burnt out every year and of course the money. So, you want proper money to be stable ... [P20, fixed-term contract lecturer]*

*Yes, well as a PhD student which is when most of my lecturing took place, you obviously have no income because you are just a research student unless you have a scholarship or something but in terms of the lecturing you get a bit of money here and there but because you are not permanent, it's not a constant stream of income which again can be a cause of stress because you still have to maintain a standard of living like all other academics as well... [P21, fixed-term contract lecturer]*

Using words such as feelings of exploitation, participant's P23 and P25 further illuminated the issues of high workloads demands versus compensation/rewards which had contributed to their experiences of WEFs-related NMHOs at the university:

*So, it's not the same as, so as a contract worker, you know, you feel very exploited, because you don't get those kinds of benefits, although you do a*

*similar work to a lecturer, you know. ... so in a way, it's, for me, it's the system where, you know, you are not paid, like you're paid around 3500 a month for, you know, for one module, you know, and that's not a lot of money, you know, so if you work two modules, that's around R7000, which you are taxed on, you know. And I remember working in one module where I had around 700 scripts to mark, 700 essays, and we had to mark it in one or two weeks. And I developed you know, bruises on my shoulders, because, you know, you'd had to mark and you had to strain your back. And I had to go to physiotherapy for this. So, it costs around R500 to go to a physiotherapist. So, if you're going to physiotherapist like three times because of your work injury, you know, how much is, is coming out of your salary; no one is paying for it, you don't have medical aid, you know, so they don't think about these things and who are you going to speak to? Because the cluster leader is already, already, like very horrible to you, you know. And so, this, there's no one to address your concerns in. [P23, temporary contract lecturer]*

*No, like I told you we are being exploited. We are being really exploited. Just imagine teaching a module and we are being paid every month R3000. You need to do everything. We are really exploited, in our area there is nothing satisfying about it. ... It's just the experiences are keeping us on the job because we still need to gain more experience in case whatever you apply tell then you have been here, and here for so many years. Even if they are trying to inquire they will be able to understand this person was teaching here. When it comes to the reward and incentive, we don't even get any incentive, we are only being paid for salaries nothing else. Salaries, we don't get any other thing. The salary is being taxed, so there is no reward and incentives. [P25, temporary contract lecturer, 5–9 years at UKZN]*

#### 7.2.1.9.2. *Sub-theme 2: Financial/extrinsic rewards of permanent contract participants*

This sentiment was also reflected by some of the permanently employed, non-NGAP and NGAP participants:

*So, I resigned [from my old university] at the end of January [2012] and then I only got appointed at UKZN in May [2012] and there was that gap, and they just never met the salary that I was on [in the previous university]. And I was then stuck for five years on a very low senior tutor salary and then only did I get to a lecturer position. So, if I was appointed in the right place in 2012, my just incremental annual increase would have taken me a lot higher than I am at the moment. So, those are very sticky little sensitive things. ... If I was in practice, architects are very much affected by the economic status. But if I work with example for government there is a much higher salary because they pay better. They recognise you as a professional and they pay you a proper rate. So, there is just that kind of, would be very good not to stress about money because I am, end of month is not a great time. [P27, 15–19 years in academia]*

*... Yes, we [NGAP lecturers] have a 20% workload compared to others but it is still a workload, we still have to teach, we still have to do responsibilities, we still have to do administrative duties within the department. We still also have to do research and output but the compensation is not that great and I was very, very frustrated that for the performance management, the 2017/2018 cycle you know I was still figuring out the system and how to get above average scores and 2019 I did get above average scores but the university said there is no funding so you won't get your performance bonuses, bummer. 2020, we didn't contract on performance management, so that little carrot that the university dangles for you to perform and go the extra mile it is not there ... I keep saying this with the remuneration aspect it is a programme the NGAPs fault, yes, I understand that the programme was aimed to get us to have PhDs and accelerate it to professors but that was one biggest loophole of the programme itself... [P7, NGAP lecturer]*

It emerged that the level of NMHOs and resilience of the participants on permanent contract was also related to not having opportunities for sabbatical leave. Participant P2 thus made specific reference to the fact that her sabbatical application was turned down a few times. She further reported that she was aware that a sabbatical application of a male colleague submitted

after her application was successful, whereas her application was still pending. She felt somewhat that this was due to her being a woman:

*So basically, being at the university for 14/15 years now I still did not have the opportunity to use my sabbatical because they didn't have money. They just didn't have money for a female. Whereas I know the males in my department they applied, I applied a year in advance, each time I kept sending it a year in advance and not just me the other lady as well who did her PhD with me at the same time, in the same block. We were both in optometry and she also was turned down but the guy he applied three months before and he got it and there was money for him and he got an entire year off, how? There is no clarity, there is no transparency, we still don't know how that has happened. [P2, lecturer, doctorate degree]*

The research participants responses also indicated that being unable to secure research grants can also lead to the experience of high levels of NMHOs. Participant P11, who was an associate professor highlighted that research funding opportunities were there, but that the process of obtaining the funding was a complex process for many. She made specific reference to personal challenges around securing money from the National Research Foundation [NRF] which she indicated to be a general challenge for both female and male academics:

*.... another big stumbling block, I don't know, that's I think for everybody is the funding issue. Getting money, having enough connections with other people that you are making good research, that's very, very important and well now anyway, the NRF doesn't provide me with any funding, I don't get any funding because you're an Associate Professor now and then they say, no, you're not good enough and you're White so you're not getting anything. Female doesn't help and funding to do, simply support my students while they are doing their degree is very, very difficult. I think that's a big problem but that's, I don't know whether being female disadvantages you in that regard, I think it's for everybody. [P11, associate professor, 15–19 years at UKZN]*

### **7.3. THE NEED TO ESTABLISH HRM POLICIES/PRACTICES TO UNDERPIN FEMALE ACADEMICS' RESILIENCE CAPACITY TO PREVENT OR MANAGE WEFs-RELATED NMHOs**

As evidenced in the main themes presented in the previous sections, the participants of this study have experienced a range of WEFs-related NMHOs. The second research question of phase-two of the study focused primarily on understanding how participants thought their human resources management helped them build their resilience to overcome the challenges outlined in the previous sections. Based on the findings generated from both phases of this study, such insights were intended to stimulate tentative suggestions for potential HRM resilience-related policies/interventions to help foster FAs' PR as early as possible.

#### **7.3.1. Introduction to the Second Research Question of Phase-two [Research Question 7]**

When asked what their experiences were like when it came to the university management, and/or HRM attending to their WEFs-related NMHOs concerns and influencing their levels of resilience, the majority of participants indicated that their expectations were not met. The participants identified all eight WEFs to be significant factors in their experiences of resilience at UKZN, and described the factors as both primary WEFs [teaching and research demands, administrative/skewed workloads, and compensation and rewards] and secondary WEFs [KSAs, professional/personal networking, coaching and mentoring support].

##### **7.3.1.1. Theme 10: Negative Experiences and Perceptions of Participants in Relation to HRM Roles in Supporting their WEFs-related NMHOs Experiences**

Overall, the participants did not see in a positive light, the role university management and the HRM in relation to providing different and proper forms of WEFs supports to FAs.

The following extracts illustrate the key point that although HRM policies and practices would not normally be aligned with mental health outcomes of FAs in the recent past, the situation may be changing because of local and international demands in academia constantly changing the nature of academic work:

*...I think the one big problem with HR and this is not only with academia, it is not only at our university, it is across the board – is if I wanted to employ a student assistant for ten months, I would have to go through a whole lot of processes and I might not get the person I want. I have a student that I would like to employ for two reasons one she needs the money; two I know what skills she has I want her to help me with other students. I have got to go through a system that is risking that HR is going to appoint another person. And I think that that is counterproductive because if they don't appoint her, I am going to withdraw the post which means I don't get the help I need from this doctoral student and she doesn't get the income she needs, because she is in her third year of her PhD, she has got no more scholarships. So, I do feel that the tick box way of how HR works and that's in general across all industry is counterproductive. I do believe that they should see that there is no nepotism that they are various things that have to be checked but they have got too much control... they have been given a set of rules that they have to work by and that I think it is counterproductive. [P12, associate professor, 10–14 years in academia]*

*I just...personally I think HR at UKZN is a bit of a joke. I have never experienced any sort of supportive interaction from HR, ever...you know I have seen they have organised, there have been workshops a year, two years ago, Women in Academia Workshops. I attended one of those ... yes, ...I didn't find it particularly inspiring in any way. Look...the reason I stay where I am is very much sort of personal and family based. My kids are happy in their schools, I like where I live, we have got a comfortable base here. At this point I don't want to sort of upend my whole life to go and work at UJ or UWC or anywhere else. So, it is, it is kind of a case of well I'll just stick it out. Yes, there're really...I can't actually think of any positives. [P1, lecturer, mother of three]*

*If I was in HR I'd make some staffing changes. Certain strong indications of incompetence. And just I would answer emails more quickly and it is just really hard to get replies and assistance often for long periods of time. ... Yes, I just feel with HR there is so many processes that are just unclear and confused, it*

*was just administratively a complete mess when I got there to UKZN and we had three-day induction workshop in Westville it was just one of the brain destroying boring experiences of my entire life and performance management is, I would burn that to the ground, that would be my first step in HR. it is unbelievable waste of my time and money. It is actively detrimental. It is just so badly ill-suited to the academic context and it is so pointless and silly that it really undermines what could be actually important sort of review and feedback and discussion because it seems so stupid them engaging in that stuff is stupid by association because it is part of that process it is just so useless, like filling it in, pick stuff at random, it just bears no real relation to what is important in the job... [P18, lecturer, 1–4 years at UKZN]*

The following vignettes describe some of the health promoting benefits [including adequate/fair work compensation, pre-natal/maternity leave and sick leave] that participants identified as factors that would facilitate the resilience of FAs who had a fixed-term or a temporary contract status:

*I think, you know, contract lecturers throughout, you know, you know, they should be paid better and they do deserve different kinds of compensations. You know, health benefits, medical aid, a pension, you know, and, you know, better salary. We're not, I don't think they are asking for, you know, to pay us like what a permanent staff member would pay ... adequate, you know, salary for the work that's done. And the thing is with, with the lecturer, you know, there's no off button, you're kind of working all the time, because you go, like, the day before you prepare for the lecture, it takes a couple of hours to prepare for the lecture, you go in and you do your lectures, maybe it's one, maybe it's to two a day, maybe three a day. So, you constantly preparing for those lectures. After the lecture students come, they chat to you. So, that student engagement, you know, and at the end of the day, you have to think about the next day, so you preparing for the night as well, for the next day and in between the hours when you're not lecturing. So, there's no off switch, you know, with being a lecturer, it's not a 8 to 5 job, you know, it's, it's throughout the day and into the night as well. So, I think that's not taken into account. [P23, 1–4 years at UKZN]*

*... there is one which I think because I got the ability to experience, is which became a bit of a sore point because at one point was fixed term appointed and I wasn't in permanent post and when you are fixed term appointed you don't have the luxury of having maternity leave that someone who is permanently employed, that was then in my time and I don't know if it has changed. If it hasn't changed maybe they may need to change it. So, I had to then cut down my maternity leave to two months and it wasn't even a paid maternity leave, I had to rely on UIF, unemployment insurance fund during that time. And I felt for someone who is a new mum and I was a first-time mom at that point. It is stuff you don't really need go through even if you are fixed term, maybe somebody could look at it from a fixed term point of view. Even if you are a fixed term it is not something that you should be worrying about. [P6, senior lecturer, mother of two]*

The research participants on permanent contract positions also referred to the need for health promoting benefits such as reduced work load concessions for FAs on prenatal/maternity leave:

*... I was pregnant, I was being penalised for being pregnant. For having my son which I felt is extremely unfair. I feel that HR should have HR something somewhere that if somebody is on maternity leave they should get at least a concession or they should be a different rule applied to them. Yes, they are not on leave for the whole year but they should have a reduced sort of allowance that they need to gain or to get to. They shouldn't be asked to get 60 PUs they should be asked to get maybe whatever 30 or something 40 or something like that. I feel that sort of thing needs to be looked at it should be somewhere because it's sort of unfair to females, it's just unfair. And maybe other line managers are different, I don't know but this was my experience and this is what happened and unfortunately my line manager was female and even the Dean of Teaching and Learning is female [laughs] so I thought that they would both understand because they are mothers as well. But they just said unfortunately our hands are tied, these are the rules, these are UKZN rules. And it is still something that when I think about it, it upsets me. [P2, mother of two, 10–14 years in academia/UKZN]*

The sentiments expressed by the participants in the above extracts show the link between supplementary WEFs and primary WEFs, and thus clearly illustrate that different forms of support structures/resources from the university HRM would have acted as protective factors to help participants mitigate their WEFs-related NMHOs. In considering the above findings, it is appropriate to pose the question what university management and HRM could do next to address and/or prevent FAs WEFs-related NMHOs. The following sections will outline the participants' personal experiences and views around the BBPRs concepts used to access their overall sense of resilience. It is hoped that the findings outlined below may lead to significant resilience interventions from the university HRM as protective factors that allow FAs to easily deal with negative aspects of their jobs and protect/promote their mental health.

#### 7.3.1.2. Theme 11: Benefits of Promoting Lower Levels of Neuroticism [NMHOs]

Of the 27 participants, a total of 14 [52%] indicated that they felt higher levels of neuroticism at the UKZN workplace environment. The specific aspects of neuroticism which are reported throughout the chapter in the form of NMHOs include stress [22 of 27 or 81% of participants]; anxiety [20 of 27 or 74% of participants]; compassion fatigue [18 of 27 or 67% of participants]; burnout [17 of 27 or 63% of participants]; and depression [16 of 27 or 59% of participants].

##### 7.3.1.2.1. *Sub-theme 1: Mental health stigma associated with higher levels of neuroticism*

Some participants also spoke about the need to change society's reinforcing idea that women who display NMHOs might be somewhat less resilient than women who exhibit positive outcomes. The participants connected their NMHOs experiences and lack of university support, claiming that being identified as a person with a mental illness or experiencing NMHOs carries a social stigma.

In this, participant P24, recounted how her experience of NMHOs was made worse, in part, due to the lack of protection from the university system and the stigma of mental health illnesses:

*There were some nasty things that happened in 2018 where people were setting up all sorts of issues around my own gender identity and all of that as well. Even being someone that people have known me for years they started to create these unusual stories that it was bizarre and it is something you don't even want*

*to talk about because it was so bizarre. So, the kind of things that can happen at the university just because of the need for power and for, to push people individually forward they would do anything, people would do anything to actually rob you of your rightful place and then the system doesn't have anything in place to protect you and certainly my experience has been that I was not protected, I was just looked upon as shame this person has got issues, and then you get identified as having mental health issues. And the stigma that goes with that as well is very serious. [P24, lecturer, 15–19 years at UKZN]*

Another key finding identified in relation to factors contributing to high levels of neuroticism and mental health among the participants was the issue of poor communication channels within the university. Research participant P9 explained how not having clear plans of the academic programme [especially, during the Covid-19 pandemic] clearly communicated, was potentially contributing to her experiencing high levels of neuroticism:

*I think for my work, the main thing would be around the worry of what my future is going to bring. So, this semester it's decided we're doing online teaching. That's, I now know what the first six months are going to look like, I know what to plan. But we don't know what semester two is going to look like. It is a load that is taking up mental space. It is a load, are we going to be expected to go back to campus, will we have been vaccinated by then. So, there is definitely a level of neuroticism and I think that again where that idea of what upper management is doing play such a role in the mental health of their staff because the sooner a clear plan is communicated, the sooner that element of neuroticism can fade away and then you can get on with planning. So, to me that neuroticism very much comes to me in an unknown like I don't know what we will be doing, will it be safe, will I have to do it, am I going to have an agency. Are my students going to have agency, are they going to feel safe, are they going to be excluded, you know your brain can just explode with the uncertainties and I certainly see that as being neuroticism and I am certainly aware of it that it is a function of not knowing in my mind. [P9, senior lecturer]*

7.3.1.2.2. *Sub-theme 2: There is link between levels of neuroticism and a sense of workplace resilience support*

In addition, some of the participants stated that they had not fully recovered from the negative work experiences and spoke about the role such events play in their minds:

*You see that environment is, as I said, I have been through all of them from panic attacks to depression to more depression to less depression to more depression to more panic attacks, name it. Anxiety levels are - they become physical actually because I had, what is the name of this, when your colon becomes reactive because of the stress. Right, we thought I had appendicitis and it was the stress, they were giving me these spasms. Irritable colon syndrome, that's what it is. So, it is not just a panic attack, that became so physical that my body started displaying physical symptoms in terms of my gastrointestinal tracts was wrecked. [P5, senior lecturer]*

*So, those [NMHOs] are very much linked. So, the anxiety, that was the fact that you know that stupid system that we have, that performance management system, where I told you I was marked as being underperforming that caused hectic anxiety for me and I was spiralling down into this depression, it was mild depression, it wasn't real. Also, I was post-natal and there must have been something happening there with the hormones and whatever because it was very out of character for me to feel that way. Normally when something like that happens, I am like that it happened already let's move forward. How do we not do it again? And at that point in time, it hit me and it was something that still upsets me today and I am sure you understand, you can hear the stress in my voice when I talk about it. I find it such an injustice it is not fair and that caused a lot [of anxiety]. [P2, lecturer, mother of two]*

*I can tell you that I had a high level of anxiety ... It was a post-traumatic stress ... my husband had to alert me and says 'P24 you just need to relax, this thing is over, you need to get passed this ... I became hyper sensitive and hyper vigilant about how I communicated in the social space, so I will give you a typical example, even with the parents of other children that my kid was going*

*to school with ... I was not relaxed in interacting with them. To the point where my best friend ... said P24 you are not yourself anymore. She said this work environment is doing something to you and you are so on edge. You are so hyper vigilant. You are here, you are talking to me but your mind is somewhere else.... So it was at that point that I said I do need to seek personal counselling on this ... and it was when my friend who knows me really well and my husband said maybe you do need, you can't only rely on your own coping mechanisms here because maybe you need to talk this out and so I sought the support of someone that wasn't just a clinical psychologist but someone that had an industrial psychology background and it was quite important to do that because they needed to understand that workspace stress that was impacting me. So again it was not linked to any support I got through HR or the university, I had to go external and pay for this on my own so that I could get myself to a point of well-being to a point where I was coping and I met a phenomenal lady who was really good at identifying and saying "P24 there is nothing wrong with you, these are the things that happened and you were really in an unfortunate situation and these are the things that you now need to do to cope with these personalities and how you interact with them and all of that". [P24, lecturer, mother of two]*

### 7.3.1.3. Theme 12: Benefits of Promoting Higher Levels of Mindfulness

Sixteen of the 27 of the participants [59%] indicated that they felt lower levels of mindfulness at the UKZN workplace environment.

#### 7.3.1.3.1. *Sub-theme 1: Mindfulness, flexi-hours, and work-life balance*

An essential aspect of mindfulness that promoted resilience of FAs was an ability to stay focused while working from home. Many of the participants spoke about the advantage of flexibility that academia afforded them despite their highly demanding roles. However, the notion of flexi-hours and the ability to work from home was interpreted in different ways by the participants, with some participants describing the notion of flexible work as being misleading, thereby contributing to women's high level of NMHOs from both domains of life.

The response of participant P17 captures this concern well:

*... The notion of flexi hours which is touted as this thing - or even working from home which we doing now because of the pandemic - is touted as this thing that is so empowering for women, is also ridiculous in the sense that you actually do work more hours when you're at home. You cannot be focused working at home and taking care of children and doing all the other care duty, laundry, whatever responsibilities - it's simply impossible. The fact that you are physically present in the home does not mean that you are mentally and cognitively present when you are working.... I speak from the perspective of labour law because that's a field that I specialise in and taking apart these notions and international notions of ILO and western notions of workplace balance were in fact where these things come from because there is no way to cope, women care duties usually wind up with women. Women actually stop working because it's impossible to do, and so you are still left with this idea that we have flexible hours and that it works and it's great whereas when you look in practice it is so onerous that where they are able, in other words, their circumstances financially are such that they can choose, women choose to raise children and forgo work just because it is so onerous. [P17, mother of two]*

7.3.1.3.2. *Sub-theme 2: Lack of control of the workload, and lack of control of emotional reaction to certain WEFs and self-doubt*

The research participants explained that WEFs had a negative impact on their levels on mindfulness. This included reduced coping abilities, the feeling of not being in control of their situations and the feeling of being overwhelmed with work.

*I think mindfulness I sort of said to a limited extent because I find it very difficult to kind of stay in the present moment, there is always something else that I am worrying about, there is always something else oh my God this has to be done, that still has to be done, etcetera. [P1, lecturer]*

*... It's very difficult to be mindful in that situation. And even to be there for the students. Because as I mentioned, you know, you just go in, do the lecture, after*

*the lecture, the students do come check to you, you do have consultations, and you do chat with the students, but I think your priority is to, you know, get out of there as soon as possible to kind of protect yourself and protect your wellbeing. And also, you know, I think at that time, you know, I felt my, you know, such low self-esteem of who I was, that, you know, as an academic, you should feel like, you know, intelligent, you know, and knowledgeable and I didn't even feel that way, you know, because you feel kind of broken as well. So, I felt like, I didn't want to engage with the students so much. Because, you know, I felt, you know, so alone, so lonely, you know. Yeah, I didn't have honestly, I didn't have any mindfulness, I didn't. There was no, you know, control ... I didn't feel in control, you know. I felt honestly, like, do your job and get out of here. You know, that was, I think, my mentality. Yeah. And, you know, if students want to email me, that's fine. I can email them at home, you know. But, you know, it was hard to break out of that, you know, that's that, that situation, you know, and that environment, because you, it's, you know, because it follows you everywhere, it follows you home, and because like the next day, you're going to be like, oh, I'm going to work, you know. And it's not a happy feeling going to where all of this is happening, you know, you just want in the end of the day, you just want to protect yourself against, you know, harm that people intentionally inflict upon you, you know, for no particular reason, you know. So, honestly, I didn't have any mindfulness. [P23, temporary contract lecturer]*

#### 7.3.1.3.3. *Sub-theme 3: Enhancing the level and practice of mindfulness*

Participants responses indicated that their experiences of resilience or ability to cope with WEFs-related NMHOs has been influenced by a range of factors including being exposed to professional developmental events that stimulate and promote mindfulness, and engaging in mindfulness practices regularly.

*... the mindfulness has come with training. ... and I think people from other fields may, other disciplines may give you a completely different response here. For me it comes to training because management and entrepreneurship is all about*

*making the right decision for an organisation to grow. So, it teaches you at a very early stage, it synchronises you even when you studying those decisions are not personal. And because they are not personal you learn to leave emotions out of them, and I have been lucky and I say lucky because not everyone has had this experience. I have been lucky that part of my community service and part of my existence in the industry because for me to be a good lecturer in entrepreneurship I need to constantly interact with the entrepreneurship world even outside the university. I need to interact with the small development world, I need to interact with the corporate world and I have activities that I do that help me to maintain those spaces and they influence my research and they influence these two areas for the better. Now one of the things that I do is serve on boards and nothing changes you liking serving on boards. Nothing changes you in not being emotional and in being factual like that. So, it has helped me manage the ability to be straightforward with the truth. The ability to not judge situations, the ability to understand that people are different and by people are different for me it does not mean that they are lesser than, it means that they come from a different understanding and interaction with the world. And it doesn't mean that I must therefore throw out what they say but it means that I must include what they say to make decisions that are more, that are more appropriate, that are more...I can't think of the word, more appropriate, more resilient. [P4, lecturer, master's degree]*

Other participants also highlighted the challenges involved in practicing mindfulness, despite being aware that mindfulness provided many benefits, including promoting their ability to control their emotional reaction when dealing with interpersonal conflicts and other adverse WEFs.

*Yes, I have done some mindfulness with my doctor. So, from that point of view I am trying. It is not easy but I am trying you know to cope with the situations, understanding my reactions and understanding how can I limit the impact on myself. That is hard because sometimes you just go feel choking someone. [P5, senior lecturer, 10–14 years at UKZN]*

*Last year there was a lot online about mindfulness and I did a lot about it, but I am not [practicing mindfulness more], I wish I have and I could, you know when you know you should do something and you just don't get to it. I should practice mindfulness more because I definitely do know the benefits of mindfulness. So maybe because I am aware of it that there is some sort of subconscious mindfulness happening that makes a bit like a duck with water going off the back. But I believe that being mindful certainly is one of the most important things to help with coping. So, there are time where I have been able to discipline myself by not coming into the office for a couple of days and just going into my sewing room and deciding I am going to something else and I find that sewing might be a mindful thing. So, maybe that's what it is just going off and that is part of the coping strategy. [P12, associate professor]*

Research participant P13 also discussed how maintaining higher levels of mindfulness impacted her resilience experiences in the context of being an academic working with students and consulting her patients in her private practice:

*Definitely, you must know what you are doing, for instance I saw a back patient yesterday in... if you give them the wrong exercises you can worsen the back problem. If I teach my students the wrong way to do a specialised test or I don't teach them properly how to do blood pressure reading or when they measure someone's blood pressure, if you are taking the reading incorrectly someone can be classified as normal blood pressure where it is actual stage two hypertension. So, you must be experienced in what you do and you must know what you do otherwise it is going to be a problem. [P13, associate professor, 10–14 years in academia]*

#### 7.3.1.4. Theme 13: Benefits of Promoting Higher Levels of Self-efficacy

Some 9 of the 27 participants [33%] indicated that they felt lower levels of self-efficacy at the UKZN workplace environment.

7.3.1.4.1. *Sub-theme 1: Being permanently employed can strengthen self-efficacy and promote resilience*

The participants who were employed on a fixed-term and temporary basis with the university opened-up about the fact that not being employed on a permanent basis caused them to experience higher levels of NMHOs. Being employed permanently was identified as an important contributor to the participants' sense of academic identity due to experiencing higher levels of job security and more desirable working conditions. Participant P20, a fixed-term contract participant, stated that she was seriously contemplating quitting her job and explained how obtaining a more permanent position at the university could contribute significantly to her sense of self-efficacy/resilience in mediating effects of WEFs-related NMHOs that she experienced:

*... in regards to being permanent in terms of it being a negative impact or factor rather, I'd say that one, so as I was explaining all my degrees have been here up to the stage of PhD because now, I am doing a PhD. So, you I got training as a tutor here, I am a product of the department because I senior tutored there. So, during my senior tutoring they started seeing that you know what you would actually make a very good academic. So, upon entering you have no idea, the dynamics of all these types of contracts and what not, because as you start you think of having a great future, so anyways since 2018 I have been on a fixed term contract till now. So, you can imagine why I have noted that down more especially because number one, it impacts on me because being permanent is important because you get benefits of having to take sabbaticals and breaks. You have opportunities of being able to teach one semester and not the other. So, basically you find that I end up being so burnt out because I would have to choose money over your wellness and mental stability because of how if you just decide to say I really need a break, I need to do one, two three and four because being permanent comes with specific benefits if I can put it that way, benefits that actually I think it could improve my resilience if I can put it that way ... So, I think that's the reason why I stated that as a factor for me it is the biggest, so at this point my solution is just to say thank UKZN, I am a product*

*of you guys but I think the relationship should end soon.* [P20, fixed-term contract lecturer, master's degree]

7.3.1.4.2. *Sub-theme 2: Not being permanent and applying self-efficacy as a self-promoting approach to secure future work contract renewal*

Participant P25 spoke also about her numerous self-efficacy difficulties in trying to always meet the work demands expectations, to guarantee the renewal of her temporary employment contract with the university.

*Your skills and your capability because now what are you able to do being able to produce, being able to give out because remember self-efficacy is all about your ability to be able to do a job I will do it very well. So, your ability to do something and that is why I want to reiterate right now that, I told you earlier on, that what motivates me and keep me going in the job is that I need to do it and do it properly well so no matter next time I will be able to get the job. So, I need to put all my best in it and doing something that you love, you need to put your best and you need to appreciate what you are doing so it is also helped me to develop more skills like I told you I have been able to develop more skills or like what I have, so all these things are actually making me more strong in the job, more capable in handling the job likewise.* [P25, temporary contract lecturer]

7.3.1.4.3. *Sub-theme 3: Ability to exercise self-control over one's future life experiences*

In addition, self-efficacy also seemed to have played a key role in whether some of the non-permanently employed participants decided to stay with the university. Two of the participants that were employed on a temporary and fixed-term contract basis by the university, indicated that they had quit their jobs or decided not to pursue a career with UKZN. It emerged during the interviews that self-efficacy increased the participants' sense of self-control beliefs about changing their negative experiences and protecting their mental health. The importance of promoting a fair working environment for FAs employed on a temporary and fixed-term contract basis to foster their resilience was recognised and emphasised:

*The UKZN as I mentioned, because I sort of stepped in as filling in for people and just doing everything at the last minute for them, you had to be very independent in the way you did things. You couldn't at the last minute [be] running around and asking people for help, so again I think that also comes back to who I am as a person because I am naturally a very independent person. It was something that carried over into my time at UKZN and suddenly my time here at 'X' University as well and it helps a lot because in this day and age there's not a lot of people who are willing to help so you have to be very independent as well ... Yeah, I would say that you know being this kind of person and knowing that I can handle things and independently and believe in myself and know that I can do it, definitely encouraged me to apply for this academic post and it is away from home as well. So, it [the 'X' University] is in the Eastern Cape and it would require me leaving home and leaving my family and friends and all that I knew at UKZN as well. So definitely that [self-efficacy] helped me to make the decision, to even apply to do the interview and to eventually take up this post, it did help a lot. [P21, fixed-term contract lecturer]*

7.3.1.4.4. *Sub-theme 4: Awareness of personality and recognition of strengths and weaknesses*

The research participants related to self-efficacy as having a depth of knowledge and understanding of their own personalities, which involved making peace with their weaknesses and drawing on their strengths:

*... so maybe I could take you a step back. I had to undergo this leadership and health professions' leader course fellowship, and through it we spoke a lot about how your personality influences your decisions and how you work within your environments etcetera. And going through that process it helped me gain better insight to my personality hence you would see I refer to it quite often in this chat today. An understanding of that side of me has made me then accept that there is some aspect that is still part of who I am, that I can still push to extend those boundaries but it doesn't cause any negative feelings of anxiety or*

*inadequacy if I don't achieve in that area as compared to my colleagues if that makes sense. [P19, associate professor]*

This resonates with other participants in the way in which their self-efficacy was shaped by the academic context through engaging and relating with their academic mentors and having a deeper understanding of their personalities.

*I guess it depends on what it is. It is like, I guess I feel a lot of self-efficacy with regards to teaching then let's say research. And I think a fair amount of that has come from that feeling of graduate school. US, have not fitting in with that group, and I did my Doctorate partially in logic and my advisor was a logician and I think that's an experience in those groups. Often those classes I was the only woman in them or one of two and I felt very out of it and sort of inadequate in those contexts. And I think that's had a negative effect on feeling of self-efficacy and also not connecting much personally with my advisor because as a woman it is/has been, sort of missed out and made me somewhat like academically insecure in some respects. Whereas my teaching aspect has been supportive and felt more effective and comfortable in that area.*

*Self-efficacy, I am not going to lie before 2018 I was very; I was on the other spectrum. I felt I can take on the world, I can do things, I can be efficient and I was a person for meeting deadlines before the deadlines came. I had systems in place; I had you know people who know me will tell you if you want something done, get me to do it. Now I don't know who am I anymore because it feels like the smallest deadline I can't reach anymore. [P7, NGAP lecturer]*

#### 7.3.1.5. Theme 14: Benefits of Promoting Higher Levels of Coping KSAs

Ten of the 27 participants [37%] indicated that they felt lower levels of coping at the UKZN workplace environment.

7.3.1.5.1. *Sub-theme 1: Institutional support is important for enhancing coping protective mechanisms*

The importance of institutional support structures and measures, such as providing coaching and mentorship support, personal and professional networking, and adequate compensation/rewards as coping protective mechanisms that could influence participants' resilience were affirmed by some of the participants.

*I have found myself digging very deeply within myself to cope and there in comes the issue around resilience, personally I have surprised myself about how I could cope and I believe that in this environment and what I went through particularly in the last four years if the individual does not have a personal support system or a personality that can pull them through, it is a recipe for disaster and a complete soul destroying experience I think for women academics if this kind of support system doesn't exist because in the end it is what you rely on and your core and what you have within yourself. [P24, lecturer, 15–19 years at UKZN]*

*No, the university does not have that [support for female academics to cope with negative WEFs] because from my point of view, I am from the post [temporary contract post], we are not given that opportunity [to de-stress], nobody even asks how you are coping, how you are doing. All they want to see is you're meeting up with the target, see that you actually produce and all these things. So, they don't look at the other aspects of your life, your emotional and psychological well-being. They do not actually look at that. [P25, temporary contract lecturer, 5–9 years at UKZN]*

*So, it is not a case of not feel...or feeling a lack of confidence in my ability. I feel like I can do my job, I just feel like there are so many external factors that limit me from doing it as well as I would want to. And then coping process of adjustments. I think there again I have said to some extent mainly because I sort of feel like stuff happened and [I] do manage to kind of get back on some sort of even shield eventually. [P1, lecturer, doctorate degree]*

Difficulties in getting work-related support such as a reasonable amount of teaching relief funding was related to the source of NMHOs by research participant P27 in the following extract:

*I think what did stress me out in this passed little while when I got this funding and it wasn't the full funding. It really got to me. It is like I cannot deal, if I don't get my full teaching relief [funding for existing academics to credential/complete their PhDs] I cannot cope. I am not going to cope. So, I worked very hard on doing this stuff that I had to do and motivating it was such a relief to get the feedback that it is in place. So, there is ways, I guess it just depends on if it gets resolved and things change, it makes it better. [P27, lecturer, master's degree]*

Later in the interview, when discussing views around issues with the university performance management system and the sense that there was not much attention given by HR to understand how staff were coping with the KPAs targets, participant P27 added:

*... what I am thinking about now is obviously we have got an academic leader and we have got this performance management system but it is only looking at kind of are you meeting your targets it is not looking at are you coping and it is also done in a very rushed way in our school, my academic leader is always too busy. But it is not very people centred and I even think it is not just about women here, I think it is anybody who works in a space would have more contact with I would think is HR to provide support on a more regular basis. HR when we were on campus, they are at the building in the front gate of Howard College and if you don't go to see them you are never seeing them and if you go there, they might not even been there. So they are very much non-existent, they are at the other end of an email. [P27, lecturer, 5–9 years at UKZN]*

7.3.1.5.2. *Sub-theme 2: The differences between having and not having positive coping mechanisms*

The participants spoke about the importance of having positive coping mechanisms support that helped reduce the negative effects of high work demands, as well as reenergising and enhancing resilience at work.

*I actually did a mindfulness course at the end of the year as a coping mechanism as well, so I realise that generally I am absent, nutty, the only way you can navigate also is through mindfulness, being present in that space in a particular time, you save time if you are 100% mindful of your activity, you save a lot of time, at the same time you even have enough time to navigate other things. I personally feel like if I couldn't or if I had or I could master the mindful[ness] concept of everything, like what I do, it adds so much value to your work especially if you have to be so multi-dimensional like a woman, so it adds so much value because you are literally, I think...I think that if you really do manage to tap into that space where you are mindful, it makes things easier with multiple roles. [P15, NGAP lecturer]*

*I think the other thing that was important from the coping mechanisms, what I really did try to practice although it wasn't easy because the demands, the hours of work were so great but I really did try to balance sort of recreational pursuits and stuff as much as I could outside of work where I could and when I could so over weekends and things and trying to get a break, I'm very blessed in that I have friends who have a farm up in the mountains in Barkly East and so I was able to take time off, like ten days at a time ... holidays and not even think of work and that was a wonderful source of healing in a way, of letting the mind rest from it all and I do believe that those sorts of, having those sorts of things to turn to and making and balancing it so that you don't, you have a balanced lifestyle, it's not all four in the morning till six in the evening which is literally what some of my days were like and then sometimes on a Saturday too because I had to catch up with marking or publishing, getting a publication out, it doesn't give you much time for recreation and people really need to because*

*that's one way of getting rid of all the negative energy and keeping your body fit and that sort of thing so that's an important resource as well in terms of coping mechanisms. [P22, associate professor]*

*Peer support, so I think this is something, so the more we speak about collegiality, and I have noticed that teams who have collegiality, who feel that they are a team seem to be more resilient, they seem to have that coping mechanism, a better way of leaning on one and other and being able to navigate challenging times. And I would really say that that's, I think even being friendly with your colleagues, being able to send someone a WhatsApp or when they AWOL that somebody checks on you. Even though it is not very common that colleagues become true friends, having that feeling of friendship amongst your team is, it is the second thing I often say about working at UKZN is how would I leave the people I work with because I have had a great team and I have had such great role models, like I wouldn't want to go somewhere else and then not have nice people. [P9, senior lecturer, 10–14 years at UKZN]*

Research participant P26 illustrated her answer by relating her experience with a female colleague, how the absence of positive coping mechanisms might contribute to the lack of collegiality among FAs:

*Yes, because you see it all depends on how they [women] are and their coping mechanism. Because I was told that that person [the woman colleague who saw P26's husband carrying their child in the airport] who made that snide comment [“that's why you are so good at writing grants and papers, is because your husband takes care of your child, you don't have to worry about doing anything at home” [P26] to me, when she had kids, she had to take a leave of absence from work for a few years. So, that she could take her kids to school, be at home with them, do everything and only when her kids were older did she return to work. So, for her to see someone [like me] with small kids doing everything that she couldn't do it created an issue. [P26, associate professor, mother of two]*

7.3.1.6. Theme 15: Additional Theme: The Traditional Psychological Resilience Definitions Can Be Misconstrued

A prominent theme that emerged from the data was that the existing conceptualisations of resilience may have shaped participants' perceptions of their resilience and affected their own experiences of resilience. The view that academic work fosters resilience in academic staff is illustrated by participant P9 in the following quote:

*So maybe that is something that people who work in higher education, we already juggle all the balls, we already think about the 'what-ifs' and part of teaching and part of research is being able to redirect yourself... you take the knock and you go well this is stressful and it is making you feel very anxious, but once you have had some time to process that and make another plan, and so yes maybe part of that resilience of people in higher education is the fact that we don't have official training, but our job does encourage this idea well. Let's make a plan, let's make it happen, you have got to get your class, you have got to be involved with your students, you have got to carry on with the research.*

[P9, senior lecturer]

In addition, the participants indicated that their experiences of WEFs-related NMHOs, were partly influenced by the misconstructions of traditional definitions of resilience. Some of the participants felt strongly that society expected women to be quite resilient in the face of adverse life experiences due to their gender and the traditional socially-constructed roles attached to being a woman. Responses by participant's P17 and P23 highlighted the issue around the high social expectation pressures that may be experienced by FAs to cope with WEFs-related challenges:

*I, myself, have a very problematic relationship with this notion of resilience, and, because from my perspective as a woman and as an academic it's one of those terms that's thrown around because people seem to be putting one foot in front of the other. So, I would posit that it's a question of coping strategies rather than talking about resilience. The idea that adversity makes you stronger, I find problematic because to my mind it actually, if you look at it, in reality women have shorter lifespans because of this resiliency [notion]. They*

*have more mental health issues and in general have more stress to deal with under the understanding that they are resilient, they are strong, they can cope and so on. So, I have a very problematic relationship with this word and this concept 'if we can just tap into how women can become more resilient then it's okay to keep the gender dynamics, gender loads, the unpaid work that women do as is', because we have tapped into the so-called strength that we have and we are going to keep using that mechanism of continuing the enslavement of women in a way, in a rationalised and justified way because they're resilient.* [P17, mother of two, aged 45–49 years]

*Oh, I think because being resilient means you can, you know, overcome these unfavourable or hostile working conditions and persevere through that. And I don't think I did that. I think by the end of 2018 is like I had enough, you know, I just worked there for one and a half years, and many others were working for a longer period of time. And they were able to, you know, withstand these conditions, but they have a different, you know, narrative and story and social relations, compared to me. So, I don't feel that, you know, I was resilient enough because the job was still available. I just said, no, I don't want this for my life anymore, you know. And to be resilient means to persevere, and, you know, harsh conditions, and I don't think I did that, like I did the bit, like, you know, I was an adequate lecturer, I, I did the tasks where I was supposed to do, and I did it to the best of my ability. But just working in that environment was demoralising. And, you know, it took away from you, it didn't add value to your life, it didn't add meaning to your life. And so, I said, no, I don't want to do this anymore. Yeah. Because it was just, I think, psychologically, it was very, very harsh, you know, and even like, the physical structure of that building, and the social relations as well, you know, you, you kept on thinking about, you know, walking into kind of a minefield, almost. Because people would get triggered so easily, and you get caught up in that. And, you know, and it's not something I want for my life, you know. And I think when I was in that situation, I was like, you know, maybe being a lecturer is a, is a good occupation. But, you know, just going through that experience, I realised, you know, maybe it's not for me, because of the politics of that situation that I was in. So, I don't think I*

*was resilient enough to stay there for, you know, any longer.* [P23, temporary contract lecturer]

7.3.1.6.1. *Sub-theme 1: Deconstructing resilience to expose more pragmatic and functional resilience HRM interventions aimed at preventing or managing NMHOs among FAs in HEIs*

The participants also spoke about society's tendency to diminish individuals if they are unable to thrive in difficult circumstances. This view is somewhat reflected in traditional conceptualisations of resilience that overestimates the idea that resilience is each person's individual responsibility and undermines the role of the workplace to address workplace stress and foster workplace resilience. The participants provided their own understandings and interpretations of resilience that strongly suggested that being resilient, at times, also involved drawing on their inner strength to cut their losses before they suffered more WEFs-related NMHOs. This view has influenced some of the participants' ability to gain or regain more control of their mental health to ensure their survival.

*And I think, you know, we need to rethink about what resilience actually means, and not romanticising resilience. Because in some situations, it can cause person harm, because society tells us, oh, you need to be strong. You need to fight through it. But in certain situations, you know, you can't be that definition of resilience, you know, you have to step back and look at your life and say, you know, is this important in my life? Is this taking me somewhere? Is it too – is it you know, beneficial for my health, for my psychological well-being, for emotions for my family? So, what is important in your life? Is this adding to your life? Or is it taking away the goodness from you, and in my situation, it was taking away all the goodness from me.* [P23, 1–4 years at UKZN]

*How would I describe it [people who overcome adversity]? Perhaps survivors, perhaps as a way of surviving what, objectively speaking, is somewhat or should be viewed as something that should not be tolerated as a normal situation for people in general, not just pointing out women so to speak but people in general. Yes, survive...I mean yes, the fact that one is able to thrive somewhat in very difficult circumstances, to my mind, doesn't justify the circumstances. So, I am*

*very uncomfortable with the idea that oh 'but you managed it, I don't see why other colleagues who have half that' ... so this is the prevailing sentiment that gets thrown out that you managed it and you finished your PhD, and I have colleagues who have been struggling, home, life, husband, this, all of the things or some of them not as much as me, and rightly speaking are not able to behave as if there is ten of them when there is only one of them. But their capacity to do what they can is somehow diminished and the ... for lack of a better word, someone like me is used as an exemplar, 'but look at so and so, but they managed and they don't have half the issues'. That I think is problematic. The idea of not coping which is a perfectly normal - in my view - response to circumstances that are extremely difficult has become pathologised as if wow there is absolutely something wrong with you. Whereas you shouldn't be coping in my view if you see what I mean, and even the idea that I am coping is/might be also deceptive. This might be my way of having a major depressive episode if you get what I mean. [P17, divorced/separated]*

#### 7.3.1.7. Theme 16: When WEFs-related NMHOs are High, HRM Resilience Interventions are Needed

Given the results on WEFs-related NMHOs, the participants were invited to provide additional feedback on the potential link between their resilience and the role of HRM, to elicit possible suggestions to help improve their WEFs-related experiences in the university. Recognising the potential role of HRM in minimising work-related NMHOs for FAs, participant's P24 and P23 reflected on their own work experiences which had caused them to question the role of HRM:

*Well, definitely when I had the issue in 2018, that was my really major engagement with HR consultant. They also sometimes play it very safe and make sure that they very guarded with what they say because you are likely to go the union route, and they are very cautious and sometimes maybe it is particular to our school, I felt the alignment between HR and the school was very close. HR could take more neutral position if I can say this. The perception that I got there was quite a lot of influence on the HR consultants, maybe not at the executive level but at the consultant level from the school.... I think that*

*these HR consultants need to be capacitated to ensure that they keep a very neutral position when dealing with sensitive matter, because if you are not an empowered staff member you could find yourself in a terrible situation. ... I felt pretty empowered at that point but at the same time I am still fragile so many years later from that incident and I am still feeling fragile every time I go back there, even though I have had intervention, I have sought my own personal counselling around this. My experience in 2018 with the way in which I was handled or the matter was handled between HR, the school, and the senior management in my school. The humiliation and the things that I experienced in that time; those are scars that stay with you as an academic. It can haunt you at the time when you don't want it... [P24, lecturer, 15–19 years at UKZN]*

*Yeah, I think, yeah, I'm sure like, thinking back, I think other lectures [permanently employed lecturers] to do that as well you know, to protect themselves in order to cope, you know, means staying away from that environment, and just going in to do the job and, and you know, making it out without being you know, scarred. You know, I think that's, you know, that's the coping mechanism, because as the contract lecturer, it's and being in an academic environment, it's assumed that it's a supportive environment, and it's not a supportive environment at all, you know. You don't get any, like, there's no friendships formed. So, I couldn't tell anyone, you know, this is what I'm going on, in my, in my life, you know, and is there, you know, and they didn't say, you know, let us do something about that, you know. There is nothing, you know, the thing is, you don't have any agency to stand up for yourself, because the person you -- who has, you know, is treating you badly is in charge of the whole department, you know, who are you going to lay claim complaint to? Because all the complaints do go to the cluster manager. And if they go higher up, you know, the cluster manager, I heard him many times say 'oh, you've disobeyed me, and you've went to a higher, higher-ranking person than him, you know, how dare you, you know, not come through me and go to someone else', you know. So, I guess... it is a, it is a coping mechanism, you know, just to ensure that, you know, you would go in and do your lectures and your consultation, and then remove yourself from that work environment in order to*

*protect yourself, and in order to, you know, make it through to the next day.*

[P23, temporary contract lecturer]

The research participant's P22, P26 and P6 further emphasised that additional structures to the university's HRM along with support programmes and virtual platforms, that had become a necessity due to the Covid-19 regulations and lockdowns, should be created to help address/prevent FAs' WEFs-related NMHOs:

*I think it boils down to this whole thing of monitoring or having a somewhere to go ... like an ombuds person almost where a woman - the other thing too, looking at our gender-based violence and looking at harassment in the workplace, that sort of thing, these are often things that women keep very much to themselves because they are embarrassing their personal, they could be threatening to their positions, their jobs etcetera. So, you need a resource outside that you know is totally and utterly trustworthy that you can go and, maybe with legal expertise or psychological, maybe a combination, a little resource of people with psychological background, legal background etcetera where a person can go and express their concerns and get advices on how to deal with them. I think that might be very helpful. I know that adds additional structures to a university but it might have a good spin off because it provides people with early intervention which is what you want to do before they become so stressed and things that they either leave and they got a gap or they become so sick they can't work. So, that terms early intervention I think is critical. What to put in place is a very good thing to answer. [P22, associate professor]*

*Maybe there should be support programmes, like female support groups because to be honest when you look at a person you can think they have it all put together but you don't know what that person is going through and maybe all this information will only become available if you have these support groups. Because I can look at this female academic and say oh wow look at her she is publishing so much, she is writing so much, she has got so many students. But we don't know what is going on with that person. Is that person suffering from insomnia or depression, that they can't do anything but work? You never, you*

*never know what that person is going through. The one that is not progressing, you don't know whether she had bad academic experience and that has completely demotivated her. It could be like we don't know what their home life is like. [P26, associate professor]*

*... I am sure we could do them [have interventions to help address/prevent female academics' WEFs-related NMHOs] virtually as well. I feel like we don't interface with each other enough. So, HR can create those spaces easily because they know who is in the system. So, whether it is females or females with males, or female type of positions or male only, whichever way they choose to do it but we definitely as female academics benefit from female only sessions because I know people are probably going through a lot out there. [P6, senior lecturer]*

The above research findings illustrate the important point that having HRM resilience systems in place in the context of FAs is tremendously important, when the workplace environment is potentially the source of their NMHOs. The research findings, also illustrate how the current study can contribute towards modern conceptualisations of resilience that could potentially be integrated into HRM policies within the context of people working in South African HEIs.

#### **7.4. CHAPTER SUMMARY**

This chapter has reported the findings of the follow-up qualitative phase-two of the study that has been designed to explore the experiences of FAs with regards to WEFs affecting their PR, and help explain the survey results presented in chapter six [quantitative phase-one]. The objectives of this phase were as follows:

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of

workplace environmental factors-related negative mental health outcomes among female academics.

Considering these objectives, this chapter has presented the findings of 27 FAs who met the participation criteria and consented to participate in a follow-up individual Zoom interview. Given that the researcher used the six-step thematic analysis process to analyse the qualitative data, the findings that emerged from the transcribed dataset were reported in the form of quotes grouped into themes and various sub-themes. Recognising that this study used a mixed methods sequential explanatory design, it was important to develop themes that primarily emphasised the participants' experiences in the context of WEFs-related NMHOs and BBPRs reported in chapter six. The semi-structured interview design also allowed the participants flexibility and the opportunity to provide a complete or representative picture of how WEFs affected their resilience. Such an approach was adopted to enhance the quality of the data collected and not to limit the emergence of new potential findings.

Based on this approach and following the thematic analysis process, it further emerged that the findings reported in this chapter were linked to the participants' self-identities as academics in the university under study. As evidenced by the several data extracts reported, the participants also tended, by varying degrees, to refer to their current demographic characteristics and academic profile contexts when speaking about their stories or experiences of resilience, vis-à-vis WEFs-related NMHOs. Accordingly, the researcher in many instances reported the overarching themes' extracts in the context from which they emerged from the data analysis, which included participants' academic identity contexts. This method allowed important comparisons to be drawn among all participants in phase-two of the study in terms of their experiences of resilience in the university under study.

The findings presented in this chapter highlight the critical issues associated with WEFs that were reported to contribute to increased levels of NMHOs for the FAs in this study. Furthermore, the findings revealed that HEIs-HRM policies/interventions can play a significant role in fostering resilience [BBPRs] in FAs when it comes to WEFs-related NMHOs.

A theoretical basis for interpretation, integration and discussion of the findings presented in chapter six [quantitative phase-one] and chapter seven [qualitative phase-two] will be provided in the next chapter eight.

## CHAPTER EIGHT

### AN INTEGRATIVE INTERPRETATION AND DISCUSSION OF THE STUDY'S QUANTITATIVE AND QUALITATIVE RESULTS

#### 8.1. INTRODUCTION

The purpose of this study was to explore potential workplace environmental factors [FAs] affecting female academics [FAs]' psychological resilience [PR] within the context of Higher Education Institutions [HEIs]. This research employed a mixed methods sequential explanatory design underpinned by the model of individual workforce resilience developed by Rees et al. (2015) [Figure 8.1]. The research data was collected using a self-report online survey [in the initial quantitative phase of the study] and individual in-depth/semi-structured online interviews [in the sequential qualitative phase of the study]. An average of 135 FAs participated in phase-one of the study, 27 of whom also participated in the sequential phase-two of the study.

It is important to gain broader understanding of the meaning and implications of the quantitative and qualitative results reported in chapter six and chapter seven of this thesis, given the integration requirement of the mixed method research approach used in this study. This chapter therefore reiterates the research questions and objectives below, to demonstrate how the integration of the data was addressed in this study. For ease of reference, these are divided into the quantitative and qualitative phases of data collection.

##### 8.1.1. Quantitative Research Questions

The first phase of the study focused on the following five research questions:

- i. What is the general perceived level of psychological resilience among female academics in the context of their workplace environments?
- ii. What workplace environmental factors do female academics identify as the highest contributors of their experiences of negative mental health outcomes?
- iii. To what extent do female academics experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors?

- iv. To what extent do female academics experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?
- v. What possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors-related negative mental health outcomes, and building blocks of psychological resilience?

### **8.1.2. Qualitative Research Questions**

The second phase of the study focused on the following two research questions:

- i. How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?
- ii. How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?

The purpose of this chapter is to provide a more holistic understanding of the salient findings that emerged from both phases of the study whereby the quantitative results and the qualitative results are discussed in an integrative/mixed manner. The discussion is directly aligned with each of the research questions and takes into consideration the literature on HEIs' workplace environmental factors [WEFs], negative mental health outcomes [NMHOs] and building blocks of psychological resilience [BBPRs] reviewed/discussed in chapters two, three and four. The constructs or concepts contained in the research questions of the current study are distinct yet interrelated constructs or concepts. Consequently, the discussion is intended to augment the understanding of HEIs context specific WEFs-related NMHOs affecting FAs' PR, and endorse the importance of HRM policies/practices that stimulate resilience within HEIs.

### **8.1.3. Quantitative Research Objectives**

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.
- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

### **8.1.4. Qualitative Research Objectives**

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

## **8.2. MAIN SOURCES OF WORK-RELATED NMHOs FACED BY FEMALE ACADEMICS IN THIS STUDY [i.e., WEFs]**

A mixed method study exploring the perceptions and lived experiences of resilience of FAs within the context of South African HEIs using the model of individual workforce resilience developed by Rees et al. (2015) has not been attempted in the literature. This study also adapted the original 25 items of the Connor-Davidson Resilience Scale [CD-RISC] scale by Connor and Davidson (2003) and used in this study to assess FAs' perceptions of psychological resilience in relation to eight workplace environmental factors at UKZN. The 25 items were grouped into five broad resilience factors: personal competence, high standards, and tenacity [factor 1]; trust in one's instincts, tolerance of negative affect, and strengthening effects of stress [factor 2]; positive acceptance of change, and secure relationships [factor 3]; control [factor 4]; spiritual influences [factor 5] (Connor & Davidson, 2003: 80).

Taken together, the 25 items were reported in a positive light, with only item 23/factor 1 [I like challenges at UKZN]; item 6/factor 2 [I see the humorous side of things when I am faced with stressful events at UKZN]; item 2/factor 3 [I have close and secure collegial relationships that offer emotional support at UKZN]; item 22/factor 4 [I feel in control of my work-life at UKZN]; and item 3/factor 5 [I believe that sometimes fate or God can help in overcoming stressful events at UKZN] being reported slightly lower than the other items. An average score above 3 out of 5 points is suggestive of a high perceived level psychological resilience (Connor & Davidson, 2003). This was an unanticipated and interesting result in light of the findings that suggest high levels of WEFs-related NMHOs among the participants in the current study. These findings support the growing notion that resilience is a dynamic and developmental process involving key multiple domains such as biological, psychological, and social domains. As such, the experiences of FAs outside the workplace domain should also be explored when resilience in the workplace context is carried out. In other words, this positive finding may be partially explained by participants' biopsychosocial factors which evolves overtime and is reflected in their demographic characteristics. Although the participants in this study had a work life, they also had a personal life outside their workplace environment. This was an important factor to consider, since participants in this study explained that life outside UKZN was also very important for them as they were able to draw their resilience from people close to them. Therefore, it could be assumed that although participants experienced high levels of

NMHOs with regards to WEFs at UKZN, the participants' individual/personal factors [an aspect of their biopsychosocial domains] may have influenced the participants' perceptions of resilience, which in turn may have moderated the negative impact of WEFs-related NMHOs.

For the sake of the current study, WEFs have been characterised as internal and/or external factors that may either promote or hinder the PR of people in workplace environment settings. The identification of potential WEFs affecting FAs' PR was derived from the content analysis of the literature presented in chapters two, three, and four of this study. The preliminary rank ordering of the WEFs investigated in this study was based on what was understood as the highest contributors of NMHOs [by various authors/scholars writing on WEFs in the context of HEIs] [see second column of Table 8.1.]. However, after collecting/analysing the data from both phase-one and phase-two of the study, the researcher rank re-ordered these eight factors into primary WEFs [administrative demands and skewed workloads, research demands; teaching demands; and compensation and rewards] and secondary WEFs [mentoring support; professional and personal networking; coaching support; knowledge, skill, and ability [KSAs] [see third column of Table 8.1].

**Table 8.1. Preliminary Versus Findings Ranking Order of WEFs-related NMHOs**

<b>WEFs levels - highest [1] to lowest [8]</b>	<b>Preliminary ranking order of WEFs-related NMHOs – based on the literature review</b>	<b>Subsequent ranking order of WEFs-related NMHOs – based on the fieldwork</b>
WEF 1	Teaching Demands	Administrative Demands and Skewed Workloads
WEF 2	Research Demands	Research Demands
WEF 3	Administrative Demands and Skewed Workloads	Teaching Demands
WEF 4	Knowledge, Skill, and Ability [KSAs]	Compensation and Rewards
WEF 5	Professional and Personal Networking	Mentoring Support
WEF 6	Coaching Support	Professional and Personal Networking
WEF 7	Mentoring Support	Coaching Support
WEF 8	Compensation and Rewards	Knowledge, Skill, and Ability [KSAs]

As can be seen in Table 8.1, the classification of the WEFs by the researcher [based on the literature review] prior to collecting data is not aligned with how the participants [as a collective] self-rated these WEFs in phase-one of this study. It is evident from the table that the research participants scored primary WEFs the highest, and secondary WEFs the lowest, in terms of contributors of experiences of NMHOs at UKZN. Therefore, the findings are interpreted and discussed collectively under each of the eight WEFs categories identified in this current study, and in the order in which these emerged in the fieldwork data of the study [from highest to lowest].

### **8.2.1. Administrative Demands and Skewed Workloads**

Of the eight WEFs explored in this study, administrative demands, and skewed workloads [Theme 4] was the first highest source of NMHOs to the study phase-one’s respondents [M= 3.87, SE= 0.11]. Strikingly, this factor seemed to be a key contributing factor of negative experiences of PR among FAs in this study and not the research and teaching factors. One would assume that either the teaching or the research factors would be ranked first highest contributors to participants’ NMHOs as per the literature, and because these factors are

responsibilities explicit in the contract of an academic job description. The sense of high levels of administrative and skewed workloads was observed across all cohorts of this study's participants.

It is important to explain what defines the job or work of an academic. Academic workloads were traditionally associated with teaching and research workloads; thus, administrative workloads were not part of an academic's role. The contemporary view is that academic administrative workloads became part of an academic's role to give a country a competitive advantage. Due to local and global competition, the administrative workload component of an academic is increasingly being regarded as an important component of an academic's job in South Africa to support social-economic transformational goals, particularly given the South African historical context and current post-apartheid era (Portnoi, 2015).

According to the Collins Dictionary (2021), the term 'academic' is an adjective defined as "work, or a school, college, or university, that places emphasis on studying and reasoning rather than on practical or technical skills". Furthermore, an academic is a countable noun which describes "a member of a university or college who teaches or does research" (Collins Dictionary, 2021). As noted in these descriptions, the terms 'administration' or 'administrative work' are absent, suggesting that the administrative role in an academic job has been stretched over time.

While, administrative workloads have risen greatly in the last two decades (Coaldrake & Stedman, 1999), teaching, research, and service workloads have also increased. In other words, academics currently undertake administrative roles over and above their teaching and research roles, making their overall academic time increasingly demanding (Kenny & Fluck, 2019). Combined together, these activities are likely to have an enormous negative impact on the level of resilience of FAs, as was evident by the overall reported score [ $M=3.87$ ,  $SE=0.11$ ] for this WEF in this study.

When this WEF was unpacked during the interviews with the participants, two important sub-themes emerged. Firstly, administrative demands and skewed workloads are likely to contribute to FAs' NMHOs levels because of the unavailability of teaching assistants and tutors

appointed to carry out tutorials and other teaching related activities. In essence, FAs lecturers who have large teaching classes may have higher-than-normal academic workloads if assistant lecturers or tutors are unavailable. In the context of this study, the tasks which might fall outside an academic's job description [considered to limit an academic's ability to successfully perform her/his core tasks, as defined in the job description and contract of employment], are considered skewed workloads. Furthermore, there is an understanding and expectation that academics should not spend too much time on bureaucratically burdensome tasks, as they contribute to the depletion of mental energy/resources, increased fatigue, and lack of motivation to perform core teaching and research duties (Cabero & Epifanio, 2021; Houston et al., 2006; Portnoi, 2015). Thus, not having teaching/research assistants or tutors, has a negative impact on the levels of NMHOs that FAs experience.

Additionally, it was also found that participants who were not the principal lecturers for their respective teaching modules [e.g., P20, P23, P25], or took the role of teaching assistants or tutors [e.g., P14, P21] had a high level of NMHOs due to administrative and skewed workload demands. However, some of the participants in this cohort, have noted that they were learning new things and gaining more experience despite the high demands. This would suggest that the FAs [for example, teaching assistants and tutors] might have been expected to experience lower levels of NMHOs if they perceive such experiences [i.e., administrative, and skewed workload demands] to be contributing to their professional self-development. It is further suggested that more senior FAs [those with many years of teaching and research experience and associate professors], may be more concerned with activities [e.g., delivering quality lectures, engaging in more meaningful academic research endeavours, and producing more meaningful research outputs via publications] which might contribute further to their personal and professional development. Therefore, it appears likely that many of the participants might be experiencing role conflict, given the concerns expressed by participants regarding the lack of teaching assistants/tutors and general support for their increased administrative and skewed workloads. Accordingly, the experience of high levels of NMHOs is more likely to continue if the source of the problem is not addressed.

The second category of issues under this WEF had to do with short-term recurrent tasks and tasks with required follow-ups. As FAs primary workloads increased, so did their short-term

recurrent tasks. For example, some participants expressed the view that their levels of NMHOs increased because they were often involved in on-going time-consuming activities. These on-going time-consuming activities included attending to work-related emails, updating teaching and learning activities on the Moodle system, and attending to postgraduate supervision workloads. This explains why FAs reported administrative demands and skewed workloads as the highest contributor of their NMHOs compared to research demands and teaching demands.

An important factor that needs to be taken into consideration by UKZN's management and HRM, is the amount of time that FAs might spend on administrative and skewed tasks which may lead to serious mental health concerns (Johnson & Lester, 2022). Sometimes, administrative work can cause NMHOs, whether there are significant volumes of administrative workloads being undertaken. Female academics may experience NMHOs from administrative work either because they are overfamiliar with tasks with which they become bored or uninterested in; or they believe they are dealing with complex administrative workloads which may require KSAs they might not possess (Lazarus & Folkman, 1984).

With the increased administrative and skewed workloads, there will be an increased pressure to fulfil other important work and life obligations. For example, FAs limit their ability to complete tasks that are most relevant for future/potential career advancement/growth [e.g., fast-tracking their credentialing programmes and/or increasing their research work outputs]. This strongly suggests that where possible, administrative workload systems and structures be introduced or improved at UKZN, to ensure the levels of non-core workloads are reasonable and do not exceed the capability of FAs. If not, NMHOs FAs might find themselves with depleted mental energy levels and resources, thereby reducing their ability to engage creatively and productively in core academic activities where time and mental resources may be more usefully served. More importantly, not having a good supportive workplace environment [which has more realistic time allocation models for administrative duties] can undermine the resilience of current FAs, which could eventually undermine the attractiveness of the academic profession for potential future FAs at UKZN and other South African HEIs (Kenny & Fluck, 2019).

### 8.2.2. Research Demands

Research demands [Theme 3] emerged as the second highest source of NMHOs among respondents [M=3.79, SE=0.10]. This theme was constructed from three sub-themes: physical health adverse outcomes, pressures of meeting the academic credentialing requirements, and factors hindering PU's productivity and KPAs targets. Some of the participants spoke about the formal credentialing pressures they experienced to complete their academic postgraduate qualifications as a pre-requisite for career progression within the university. The participants also reported experiencing time constraints and limitations to undertake academic research activities such as writing articles for peer-reviewed publications because of the amount time spent on teaching workloads. The problem lies with the teaching formula or module which focuses only on the time at which teaching and students consultations take place. The participants also stressed the fact that they need to undertake several tasks beyond the lectures and consultation times. For example, preparing teaching materials, addressing individual students needs during and after classes, marking students' assessments, providing feedback, etc. This is made worse if classes are large and if there are large number of students who are underprepared and require extra attention from lecturers to keep up with the learning objectives. This means that the actual lecturing time, inclusive of other related tasks, is much higher than the teaching formula speculated time [i.e., expected teaching time] which may not quite reflect the amount of time that academics might spend on the above tasks which support the teaching and learning objectives. When it comes to delivering lectures, academics do not have flexibility in terms of choosing the teaching days and times that best suit them. The UKZN, like other HEIs, provides a plan of days and times at which lecturing or tutorial events are scheduled to take place.

Unlike fixed-time lecturing or tutorial timetables, academic research time allows more flexibility for academics. Even though academic research work may be more flexible, its time-intensive nature is such that it requires researchers to extensively read and review literature on the chosen research topic to generate new knowledge. Consequently, spending too much time with teaching workloads is not without its potential of unintended adverse consequences. Compromising on research time during normal work hours means that academics will need to work after normal hours and on weekends to catch up with intellectual research work. Since most of the participants indicated that there was lack of quantity and quality time needed to

effectively meet their KPAs, it is reasonable to conclude, therefore, that academics do not work a normal 8-hour/5-day job compared to professionals in different types or fields of work. Long working hours also means sleeping less and compromising on quality time with ‘self’ or loved ones.

Undoubtedly, where there is huge pressure to meet the credentialing requirements and research PUs, the lack of time FAs will likely experience will increase NMHOs such as feeling drained of mental energy resources, frustrated, and depressed for being unable to meet university and personal work targets. This was the case for some of the participants in this study, where the increased KPAs expectations set by the university contributed at least in part to the higher levels of NMHOs experienced by the respondents, as well as having a significant negative effect on their physical health. Mental health intersects with physical health in a sense that if one fails to maintain or sustain a positive mental health, eventually and inevitably serious physical health problems can be experienced.

### **8.2.3. Teaching Demands**

Teaching demands [Theme 2] was the third highest source of NMHOs reported by respondents [M=3.36, SE=0.12]. The results demonstrated that teaching work-related NMHOs led to experiences of serious physical health complications for some FAs [e.g., P22, P16, P23]. Participants from disciplines such as Humanities [e.g., P1, P18, P23] described experiencing work-related NMHOs emanating from being involved in teaching large classes, teaching underprepared students, and having to regularly re-design their teaching curriculum. On the other hand, participants [e.g., P7, P22] from Health Sciences noted that they not only experienced challenges with teaching students at the university, but they had the added pressure of providing on-the-job training to students at the hospitals and clinics.

The results indicate that a few of the participants [e.g., P9, P11] began experiencing higher levels of NMHOs because of the transition from physical classes to online classes [following the Covid-19 pandemic lockdown measures in South Africa in 2020], since the online learning platform/system required different sets of teaching skills. It is possible that age [specifically in relation to familiarity of using online learning tools] may have contributed to the participants’ NMHOs experiences during the period of adjustment to online teaching and

learning. Some studies also suggested that senior academics would rather have physical classes than online classes in some instances (Blowers et al., 2022; Bossi et al., 2022; Cabero & Epifanio, 2021; Marsay, 2020). However, this study also found that some of the younger cohorts of participants reported higher levels of NMHOs due to making the adjustment to online teaching and learning [e.g., P15, P20]. Therefore, younger participants who lack KSAs for online teaching and learning, could similarly be expected to experience NMHOs from teaching online classes.

The participants [e.g., P8, P13] also indicated that lecturing session disruptions that resulted from increasing demands from the SRC and students strikes affected their resilience negatively. It is important to keep in mind that resilience in the workplace context depends not only on the individual internal resources, but on the nature of adversity and whether the challenge experienced would be perceived as a positive challenge. It seemed as if the participants understood the issues faced by disadvantaged students at the university, but at the same time saw themselves as victims of such events. In the context of South African universities, students-related issues may, therefore, contribute to FAs increased NMHOs, but also feelings of antipathy towards students and a reduced motivation to teach.

The present study revealed that women are more likely to experience high levels of compassion fatigue in the context of working in HEIs. Indeed, as evidenced in the phase-two interviews, many of the respondents were personally unaware of its affects. In this regard, the study of resilience by Rees et al. (2015) in the context of healthcare professionals, has suggested that compassion fatigue is likely to be experienced by individuals whose work involves the need to exhibit emotional demeanour such as compassion that customers need/require/expect. The study by Rees et al. (2015) and other researchers, also suggests that a person's degree of compassion fatigue [also known as secondary stress] depends greatly on the person's personal attributes and can vary from one workplace context to another (Cusack et al., 2016; Elkonin & Vyver, 2011; Lian & Tam, 2014; Tahghighi, 2018). In general, academic workplaces expect their employees to display a constructive demeanour during all interactions at work regardless of whether it comes naturally or not, to ensure a positive and professional work environment. However, it is worth noting that not all interactions at work can be positive.

Within the context of this present study, it became evident that the participants' academic roles involved increasing interaction with other people through teaching and learning, collaborative research work, community engagement work, and maintaining interpersonal work relationships. By its very nature, academic work has the potential to lead to both compassion satisfaction and compassion fatigue. Unlike compassion fatigue, compassion satisfaction may increase a person's motivation at the prospect of enhancing other people positive experiences. Given the focus placed on the participants' experiences of NMHOs, it is important to discuss the phenomenon of emotional work in relation to participants' experiences of compassion fatigue. Emotional work or labour is generally described as an employee's expression of organisationally-desired emotions during interpersonal transactions at work (Robbins & Judge, 2013: 108). Tunguz (2014: 6) defined this in the context of a higher education workplace as "the effort required to display 'authoritative' emotions in situations that call for them". These definitions imply that interacting with disruptive students or experiencing interpersonal conflicts with colleagues and other people at work can spiral into emotional problems such as occupational compassion fatigue. Emotional work can have a more negative impact on women because they are generally perceived to be better at providing emotional support due to the socially-constructed roles of women as caregivers, mothers, and wives. Due to these constructions, it becomes easy for FAs to experience high levels of compassion fatigue as it is expected of them to provide ongoing emotional support work. The findings that emerged from this present study thus demonstrate how FAs sometimes fail to realise that their frequent interactions/engagements with people could lead to increased feelings of compassion fatigue. This is because in a workplace context it is not unusual for co-workers to share personal/professional life concerns.

It is suggested that while women are more likely to accede to requests for emotional support of those at their places of work, this often leads to higher levels of compassion fatigue as they absorb secondary negative emotions along the way. In fact, researchers often use the term 'emotional contagion' to describe a person's tendency to mimic the emotions [positive or negative] of the people they interact with (Barsade & Gibson, 2007; Luthar et al., 2015; Robbins & Judge, 2013; Tunguz, 2014). For example, more experienced FAs [especially senior academics] may be expected to coach and mentor less experienced academics [junior academics] and that require the ability to deal with potential interpersonal interaction problems

that might occur between the parties and instigate NMHOs. Furthermore, FAs with both teaching roles and supervision roles may also engage with their students on a more personal level to empathise more deeply with them, thereby providing the extra academic motivation and help to uplift their academic outcomes.

The cumulative effect of many years of gender inequality post-apartheid, has helped further entrench the phenomenon of emotional work which results in compassion fatigue for women in South African HEIs. For FAs, emotional work can lead to compassion fatigue because it involves an ongoing and [somewhat] exhausting process of adjusting/manipulating emotions to evoke/project the types of emotions which are expected in specific work situations. Accordingly, the South African context of HEIs post-apartheid, also means that FAs who, for example, have active lecturing roles, may have frequent social interactions with individuals from diverse backgrounds and opposite personalities which can result in experiences of compassion fatigue. The data suggests that even though the participants enjoyed teaching and engaging with their students, this part of their job had also contributed to high levels of compassion fatigue, since they felt the need to help address the different of needs students, especially those from disadvantaged backgrounds. These included engaging beyond the class times, during individual one-on-one consultations, and attending to regular email, as well as telephone calls queries from students.

In terms of maintaining interpersonal work relationships, the participants [e.g., P4, P14] also related experiences of compassion fatigue associated with providing teaching and learning support to their co-workers. It further appears as if some of the participants felt that they were not only expected to provide ongoing compassion to their own students, but were also expected to take on the role of department/office peacekeepers. Specifically, the participants related higher levels of compassion fatigue in situations where they felt their colleagues consistently failed to carry their share of the work, or did not take responsibilities for managing their own students' interpersonal challenges. As the participants went on to report, they were expected to keep up with shared work responsibilities and provide extra emotional support work. It is obviously challenging for FAs to prevent or reduce higher levels of compassion fatigue if they fail to establish proper coping mechanisms or manage their emotional dissonance more effectively during interpersonal interactions at work, that may cause secondary stress and other

forms of NMHOs. Experiencing compassion fatigue can have a negative impact on other areas of FAs' work-life and the university work environment. Hence, promoting the resilience of women in the context of HEIs is of great importance.

#### **8.2.4. Compensation and Rewards**

The fourth WEF reported by respondents as being a significant source of NMHOs was compensation and rewards [Theme 9] [M=3.05, SE=0.13]. Though it was not the objective of this study to explore participants' precise compensation and rewards amounts received, it was necessary to gain a general sense of the extent to which participants' total rewards [i.e., extrinsic, and intrinsic work rewards] was experienced/perceived as a factor contributing to NMHOs at UKZN.

It would be unrealistic to assume that FAs receive high or above average compensation and rewards. The levels of remuneration and benefits are determined by the type of employment contract that FAs hold, which is influenced by their levels of qualification, experience, and KSAs. There are considerable differences in remuneration packages between permanent contract and non-permanent contract academic staff members, whereby permanent employed staff usually have greater job security, pension benefits plans, and medical aid plans compared to non-permanent employed staff. In the context of FAs, being permanently employed comes with having job security and further means being able to take paid leave [including maternity leave], sabbaticals, and attend training, workshops, and staff retreats within the university].

Unfortunately, as HEIs worldwide are increasingly facing a decline in permanent employment opportunities, this means that an increasing number of women entering academia may be faced with compensation and rewards challenges due to being employed on a fixed-term or temporary basis. As a result, FAs might find themselves remaining in fixed-term posts or temporary employment for longer periods than expected. Likewise, FAs on non-permanent contracts may be more likely to report high levels of NMHOs due to limitations of job security, pension, or medical aid cover. Given these factors, FAs employed on a fixed-term or temporary basis might be expected to adapt to lower levels of financial/extrinsic rewards, as well as lower levels of non-monetary/intrinsic rewards. It strongly emerged that even though the participants might have perceived themselves as resilient individuals, it was difficult to maintain their

resilient at times. In some instances, the participants decided not to bring up their concerns to management/HRM for fear of not being re-appointed as their fixed-term or temporary appointments also required them to go for a new interview to be re-employed and carry on with their work. For example, P25 went to great efforts to show high levels of self-efficacy and get herself re-employed.

Not having reasonable compensation packages may add to the high NMHOs levels of FAs. The findings indicate that participants who were employed on a fixed-term and temporary basis generally felt that the compensation and rewards levels were not commensurate with the levels of academic workloads. This in turn contributed further to participants' higher levels of NMHOs. The findings also indicated that fixed-term and temporary employed FAs were in a more disadvantageous position with regards to acceptable working conditions and career opportunities when compared to permanently employed FAs in this study. The fixed-term and temporary-contract participants described feeling dissatisfied with their compensation packages and the lack of monetary bonuses or rewards for the additional work done, because in some instances they felt that their workload levels were equivalent to that of permanent academic staff members. In other instances, they also felt that their workload was heavier or unfairly increased because of the expectation that they would pick up the slack for other colleagues.

Participants P23 and P25 explicitly mentioned the amounts received for teaching modules as temporary academic staff at UKZN. Participant P23 stated that she was paid R3 500.00 per month for lecturing 1 module, and participant P25 indicated being paid R3 000.00 per month for lecturing 1 module, which made it difficult to make ends meet. The increased level of NMHOs may not only be because individuals believe that they may be doing a demanding job which deserves adequate compensation, but also that individuals feel that due to time limitations of their current demanding jobs, they cannot invest their time in other short-term work opportunities that could provide additional income.

There is ample evidence to suggest that positive perceptions of reasonable compensation for work done enhances FAs' self-efficacy and coping at work. Having reasonable compensation and rewards for work performed, enhance the resilience of FAs because they lessen the

undesirable effects of monetary-related stress and anxiety if FAs feel that their health-related financial concerns are taken care of. Since the university does not provide fixed-term and temporary contract staff with medical aid cover, this means that if FAs experience work-related injuries or serious ergonomic problems, they would be expected to cover for the associated medical costs themselves. For example, in the case of participant P23, she indicated that she experienced a strain on her back when she had to mark about 700 students essay scripts for a module she taught, and paid R500.00 out of her R3 000.00 monthly compensation for physiotherapy even though her injury was work-related. It was thought evident that FAs on a non-permanent contract basis should also have access to medical aid/care benefits, since the levels of NMHOs from teaching, research and administrative work demands tended to be high among this group in the study, with relatively few of the participants indicating physical health issues because of their workload demands.

Some of the participants shared the view that the resilience levels of their permanent academic colleagues had to some extent been higher than their resilience levels because their permanent academic colleagues had higher compensation and rewards benefits, more flexibility, autonomy, and control over their jobs. Not only do these positive aspects of permanent contracts make people more resilience and less vulnerable to developing NMHOs, but as noted by some scholars (Mabaso & Dlamini, 2018; Merga & Mason, 2021; Ntisa et al., 2016), they can have a positive impact on people's overall health, which is essential to thrive amidst adverse events in the workplace environment, but in the home environment as well.

If fixed-term or temporary contract FAs contribute equivalently to the production of intellectual knowledge in HEIs, then the differences in remuneration packages between permanent contract and non-permanent contract academic staff members should be reduced. This will help increase their self-efficacy to cope with stressors at work without compromising the highest academic value of UKZN, which is to provide high quality teaching and learning to the students of the institution. In other words, if non-permanent FAs with active teaching roles feel that their level of remuneration received is too low to compensate the amount of time and great efforts invested to those roles, then they may be willing to devote less time and energy to their teaching tasks.

Interestingly, not all participants who were employed permanently reported lower levels of NMHOs, or being satisfied with regards to their level of compensation and rewards received. The findings also showed that, although a small number of this study's participants [who were permanently employed] reported lower levels of NMHOs due to compensation and rewards, those participants with permanent contracts also indicated that they worry about money sometimes as their compensation and rewards did not remain proportionate and reasonable with respect to their academic KSAs/qualifications, progress made in their academic career, and increased workloads levels. Specifically, the high levels of NMHOs for permanently employed FAs participants included: the lack of acknowledgment of professional qualifications, and slow salary progression; barriers to qualify for, and obtain KPAs bonuses; the unavailability of funding to support sabbatical programmes and academic credentialing processes, and securing research funding from funding institutions such as the NRF. For example, according to P27 [who indicated being an academic for 15–19 years], when she resigned from her previous academic institution and was appointed at UKZN in 2012, her salary was cut by a third because UKZN did not take into account her prior experience and the professional qualifications completed in terms of being a qualified and accredited professional architect, and focused only on the university qualification framework which viewed her professional qualifications as not being a Master's or PhD degree. To some extent, the likelihood of P27 experiencing NMHOs was inevitable, given that she had already resigned her job as a lecturer at her previous academic institution, when she realised the shortcomings of her new appointment as academic at UKZN. Furthermore, according to P27, upon her appointment she was stuck in a very low senior tutor salary position for five years, even though she was performing at a lecturer's level, and then only did she get to a lecturer position. This in turn contributed to her high levels of NMHOs as she felt that she retrogressed to the starting point of her academic career. This scenario could have been prevented if HRM policies and practices at UKZN were formulated to recognise unique attributes in terms of years of professional practice experience in the academic field of interest, alongside professional degrees completed outside academia, and the required academic credentials. In this instance, it could have been helpful that HRM practitioners implementing the policies were sensitive to the potential negative impact of WEFs on P27's resilience, and made a concerted effort to create alternative paths for her to be promoted timeously to the position of a lecturer that reflected her KSAs and previous employment in a lecturer's position.

### 8.2.5. Mentoring Support

Mentoring support [Theme 8] emerged as the fifth scoring WEF in terms of contributing to respondents' levels of NMHOs [M=2.71, SE=0.12]. Mentoring support is an increasingly popular topic of interest in HEIs, given the increasing demand for HEIs to be seen as a symbol of excellence of production of knowledge and science. It is described as “offline help by one person or another in making significant transitions in knowledge, work or thinking” (Morgan & Rochford, 2017: 04). A mentoring process is a long-term process based on a structured plan or design phase aimed at influencing employees personal and professional development. In this process, the employee will typically be paired with someone they may have ongoing relationships such as their direct manager/s or supervisor/s, who can provide continuing and customised support for employees (Robbins & Judge, 2013; Rowley & Jackson, 2011).

A key point of discussion in regard to this factor is whether the participants in this study felt they were provided with the necessary level of mentoring support to meet the UKZN's current strategic plan of “inspiring greatness”. Although for some of the participants, the levels of NMHOs from mentoring support were moderately lower, other cohorts of participants experienced high levels of NMHOs from mentoring support.

Some FAs in this study found themselves in difficult positions regarding professional self-development opportunities as they felt they were left on their own to figure things out when they began working at UKZN. According to a few of the participants, [e.g., P2, P4, P6, P16, P19, P26], there was lack of institutional mentoring support [in the form of financial resources and emotional support] at UKZN, and they had to rely on their own self-mentoring initiatives through self-initiated job KSAs training and development, and figuring out how to become more effective academics. In other cases, a few of the White and Indian participants [e.g., P1, P8, P11, P24] also expressed great dissatisfaction with the current lack of mentoring/coaching support faced by non-Black FAs at UKZN. In their view, the current transformational policies of the university left non-Black FAs particularly vulnerable to the NMHOs because Black younger FAs were more likely to have mentoring/coaching opportunities as part of the university's transformation agenda.

An additional issue raised by some of the participants was that of increased work-life balance issues for FAs. Several of the participants [e.g., P2, P7, P8, P11, P25, P27] felt that there was lack of recognition that the nature of academic work can infringe on their personal lives because academic work is ever increasing, while FAs still tend to fulfil traditional women caregiver's roles [i.e., caring for children, families, and the home]. In connection to the above, an important and interesting set of findings from this study further suggested that levels of neuroticism for some of the participants [because of levels of NMHOs] was sometimes influenced by participants' hormonal disorders and changes, motherhood, and post-natal experiences. For example, participants [e.g., P7, P15, P20] felt particularly more vulnerable and prone to experiencing higher levels NMHOs during their time of menstruation, and following child birth [e.g., P2, P18, P24]. This suggests that FAs' general motherhood or reproductive health concerns may also contribute to levels of neuroticism. This further suggests that HRM at UKZN should be sensitive to the potential internal dynamics of neuroticism when it comes to the women workforce of the UKZN, by ensuring that FAs who may be affected by such issues are not marginalised, but can receive optimal health support.

#### **8.2.6. Professional and Personal Networking**

The sixth WEF reported by respondents as causing moderate NMHOs was that of professional and personal networking [Theme 6] [M=2.68, 0.11]. In the workplace setting, networking denotes an interpersonal relationship process that allows individuals with differences and similarities to interact both on a personal and professional level and build on one another's strengths. Even though networking is often regarded as an individual's effort, it is important to make workplaces such as HEIs take some responsibility in this regard, since overall productivity and performance in HEIs depends to a large extent on collaborative work through formal and informal interpersonal interactions. Activities such as teaching, research and administrative/skewed work often demand frequent interpersonal interactions among members of staff [both within and outside their departments].

What has transpired strongly in this study is that participants differ greatly in terms of their demographic characteristics and academic profile. It is noted that as FAs workloads increase and work-life balance increase, the opportunities and desire to network decrease (Franco-Orozco & Franco-Orozco, 2018). Therefore, the among the participants in this study

differences reflect their identities and personal lived experiences both at UKZN and outside the workplace environment. To a certain extent, these differences among participants also reflect their level of [and needs with regards to] professional and personal networks at UKZN. Specifically in terms of the workplace environment, FAs [e.g., P7, P16, P19, P23, P24] were constrained by certain problems of victimisation, stigmatisation, bullying, work-life balance, and lack of institutional networking platforms which limited their ability to engage in constructive interactions and networking opportunities. The participants were also negatively affected by their coping styles and failure to identify potential networks themselves to promote their personal and professional development goals.

At the same time, it is acknowledged that networking in the workplace context is not necessarily meant to be always positive, given employees' diverse personality contexts (Idahosa, 2019; Ion, 2014; Morley, 2013). Positive relationships tend to be prevalent between people who share similar values and experiences, and result in positive mood and emotions. Consequently, people in positive relationships tend to be inclined to share their work and family life experiences compared to people in negative relationships.

Negative relationships are those where relationship conflicts may be more present and tend to contribute to high levels of NMHOs. Robbins and Judge (2013: 322), describe relationship conflicts as "those based on interpersonal incompatibilities, tension, and animosity toward others". However, it is also generally suggested that conflict is not always a negative thing, and should be regarded as part of everyday life. There is considerable research evidence linking relationship conflicts to positive outcomes at work, including personal/professional development and workplace productivity. For example, in his five-stage group-development model, Tuckman (1965) proposed that relationship conflicts would lead to team members' behaviour adjustments and team members' increased ability to perform well the tasks at hand. The theory implies that when FAs engage in personal and professional networking opportunities, they should be able to enhance their levels of self-efficacy to perform various academic roles and tasks (Marin et al., 2022; Robbins & Judge, 2013; Rowley & Jackson, 2011).

Some participants [e.g., P6, P14, P16, P19, P22] felt that more could be done to increase collaborative network opportunities for FAs. Universities can facilitate such exchanges because they have a HRM system with detailed records of employees' demographics and professional profiles. Likewise, universities such as UKZN have the decision-making power to mobilise resources and initiate collaborative network platforms [either physically or virtually] where FAs can initiate and maintain personal and professional networks with other academics from their academic fields and beyond.

### **8.2.7. Coaching Support**

Coaching support [Theme 7] was the seventh source of NMHOs as reported by respondents [M=2.60, SE=0.12]. The concept of coaching is generally associated with the sports profession, with various non-sports occupations increasingly recognising the potential to promote healthy behaviours and more positive work outcomes through coaching programmes and interventions in a workplace context. It is defined as a “collaborative helping relationship between a coach and coachee, which is focused on working in a systematic way towards agreed goals to enhance professional performance, foster ongoing self-directed learning, increase personal satisfaction and personal growth” (Morgan & Rochford, 2017: 2). The literature also tends to use the concepts ‘coaching’ and ‘mentoring’ interchangeably. However, coaching differs from mentoring in that coaching is expected to be a short-term process which is focused on the overall tasks of the job and is performance driven without the need of a specific coaching design. This process allows individuals to be coached by their immediate work manager/s or supervisor/s, providing them with quick and effective techniques to manage work-related challenges that can become serious NMHOs.

The coaching support factor in relation to the experiences of resilience of the FAs in this study, pertains to the extent to which this study's participants felt empowered in their current roles to access workplace resources that promoted their professional and personal development. Participants [e.g., P2, P4, P6, P16, P19, P26] reflected on similar types of issues to those of their mentoring support when explaining their experiences of NMHOs from coaching support; evidence that participants used these terms interchangeably [as in the literature] to describe their experiences.

Some participants emphasised the importance of providing adequate KSAs support to FAs at UKZN to help them achieve more desirable outcomes at UKZN. Participants suggested that UKZN could establish more formal systems and make resources available for both coaching and mentoring support initiatives to help FAs become more resilient. This in turn will potentially influence the level of resilience of FAs and their response to adverse events at UKZN, resulting in achieving the high-quality teaching and learning objectives that UKZN expects from them. During the interviews, it became quite evident that some of the participants [P2, P4, P6, P8, P19, P22, P26] who reported experiencing similar mentoring and coaching support challenges at UKZN, as well as difficulties to find/maintain a positive work-life balance in the past, volunteered to mentor and coach other FAs. Accordingly, they indicated that they engaged in personal efforts towards providing other women academics with coaching and mentoring support that could contribute to their professional self-development and work-life balance.

It is important to note that senior academic staff at the university play a crucial role in promoting the resilience of junior FAs. Through constructive coaching and mentoring relationships, potentially vulnerable FAs can develop important internal protective resources [i.e., resilience] such as self-efficacy and coping, that can be accessed during times of adversity. In such instances, the university could benefit from establishing more formal coaching and mentoring systems where more senior FAs within UKZN may be encouraged to play a more crucial and positive role in promoting the production of knowledge and science at UKZN. Academics that have the qualities necessary and willingness to play a mentoring and coaching role, could be identified to support the university's main objectives and uphold the university's values.

#### **8.2.8. Knowledge, Skill, and Ability [KSAs]**

Knowledge, skill, and ability [KSAs] [Theme 5] emerged as the eighth and [relatively] lowest scoring WEF in terms of its contribution to the respondents' levels of NMHOs [M=2.35, SE=0.10]. It is interesting that these factors were rated lowest in terms of contributing to participants' NMHOs, suggesting that, as a group, participants experienced less issues in relation to KSAs. There were several commonalities between study participants where they have described feeling competent enough to do their jobs. This may be because many of the

participants had many years of academic work experience and had held PhD degrees. The participants reiterated that the main source of their NMHOs was the issue of excessive workloads.

The types and levels of KSAs that workplace settings demand/expect from their employees differ between different categories of employees. For example, in university workplace contexts, the type of KSAs required by academic staff members is different from the KSAs required for support staff members (Higher Education South Africa, 2014). As mentioned earlier, the main purpose of the work of academics is the production of new knowledge and science [for the benefit of society], involving three main WEFs: teaching, research, and administrative work. Academic work compared to other occupations may require high levels of resilience because it is intellectually more demanding, in the sense that academics are expected to display high levels of KSAs in addition to their formal academic qualifications.

Nonaka et al. (1996 cited in Rowley & Jackson, 2011: 118) describe knowledge as a “meaningful set of information that constitutes a justified true belief and an embodied technical skill”. In the face of adverse WEFs, the more theoretical or practical understanding FAs have of psychological resilience and its BBPRs, the more likely they are to respond proactively to such WEFs-related adversities before they experience serious levels of NMHOs. The skills and abilities that FAs possess come into play in adverse events at work. There are several descriptions of skills and abilities in the literature. Raju (2014: 165) offered a more generic but fitting definition of skills as “life skills such as communication and interpersonal skills, critical thinking, problem solving and teamwork which allow individuals to function not only in disciplinary or subject domains but also in employment and social situations”. Abilities can be described as “the hereditary or acquired characteristics of a person that enable him/her to display or learn behaviour or performance of a certain kind” (Steyn, 2019: 22). In the academic work context, FAs abilities include [and are not limited to] having the ability to apply specialised knowledge or expertise [or technical skills]; having the ability to understand, communicate with, motivate, and support other people, both individually and in groups [human skills]; and having [mental] having the ability to analyse and diagnose complex situations [conceptual skills] (Robbins & Judge, 2013).

There are general assumptions that academics are well-informed and knowledgeable in their fields and areas of work (Council on Higher Education, 2016b; Ferman, 2011; Selesho & Naile, 2014; Williams, 2017). This could be because academics are usually in a position of teaching undergraduate students [if they have lecturing roles], advising and supervising postgraduates research students [if they have research supervision roles – after obtaining their own postgraduate degree like Master’s or PhD], and performing other academic tasks such as conducting and initiating their own research projects, publication work, and doing community engagement work. However, a few of the participants reported facing some KSAs challenges around these areas, and indicated these factors as influencing negatively on their experiences of resilience at work.

Since academics are expected to provide answers to questions posed and solutions to problems that emerge, the fear of losing their jobs, and not being accepted or respected, may lead to academics portraying a misrepresentative image of themselves as experts and well-informed academics, when they might be in need to being trained to enhance their KSAs (Poyner, 2016; Sadiq et al., 2019). This also causes NMHOs as explained by some of the participants in this study. Participant P22 indicated that she had to learn to be comfortable to admit when she did not have a specific answer when certain questions were posed by students in her class, and that she would come back to them in the next class. According to her this was the best advice she received from a colleague to alleviate levels of anxiety around teaching and interacting with students.

### **8.3. THE CRITICAL ROLE OF UNIVERSITY MANAGEMENT AND HRM: A PROPOSED MODEL OF FEMALE ACADEMICS PSYCHOLOGICAL RESILIENCE AT HEIs**

The significance of having resilience interventions at an institutional policy level lies in the fact that it reduces the ongoing stigma of being known as experiencing NMHOs, as was the case of a few of the participants in this study. Various researchers who explored challenges of women in academic workplaces and beyond, advocate that resilience support should be available to employees who may be involved in highly demanding roles (Lian & Tam, 2014; Marin et al., 2022; Poyner, 2016; Sadiq et al., 2019).

Some of the participants claimed that their high levels of WEFs-related NMHOs was [to a great extent] due to the failure of university management and HRM to effectively address participants' ongoing WEFs-related concerns [Theme 1, Theme 10, and Theme 16]. As a result, some of the participants indicated contemplating searching for better work opportunities in other academic institutions and vacating their jobs at UKZN because of a combination of the WEFs factors and issues discussed above (Selesho & Naile, 2014). In fact, when the interview with participants P21 and P23 took place, they indicated that they had left their jobs at UKZN. On the other hand, P1, indicated that although she felt she was on 'survival mode' due to the increased levels of academic workloads and a general sense of lack of institutional support, she was not prepared to move to another university because that would compromise the lifestyle of her family, specifically because her children enjoyed their current schools.

These findings clearly show that management and HRM interventions play a significant role in mitigating the experiences of WEFs-related NMHOs that FAs may be faced with. It is thus important to reiterate the application/relevance of the model of resilience used to guide this study, as depicted in Figure 8.1. The figure illustrates the potential effect of having HEIs' interventions that help promote PR among FAs. Importantly, it illustrates that PR is/can be shaped/promoted through lower neuroticism levels on the one hand; and higher mindfulness, self-efficacy, and coping levels, on the other. Consequently, this process helps mitigate against high levels of WEFs-related NMHOs among FAs, thereby contributing to achieving positive psychological adjustment.

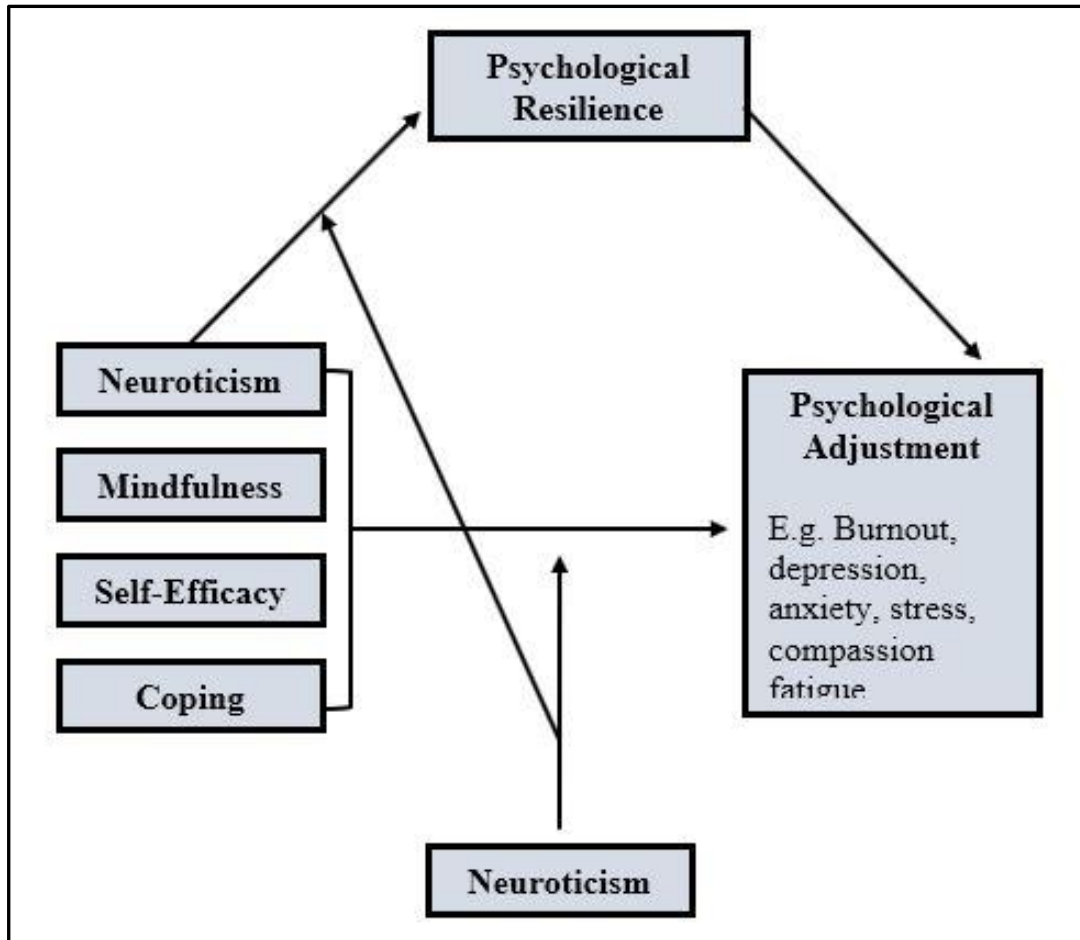


Figure 8.1. The Model of Individual Workforce Resilience

Source: Rees et al. (2015: 4)

The following sub-sections will outline each NMHOs individually as reported/experienced by the FAs and explore the extent to which BBPRs would or would not contribute to lower levels of WEFs-related NMHOs among FAs.

### 8.3.1. Negative Mental Health Outcomes [NMHOs]

Negative mental health outcomes [NMHOs] are outcomes that indicate serious long-standing and unresolved mental health issues. All workplace environments and jobs have pressures which may be considered as normal pressures of the job and may not be expected to immediately result in serious NMHOs.

#### 8.3.1.1. Stress

Stress emerged as the first highest type of NMHOs reported [ $M=3.71$ ,  $SE=0.11$ ]. Stress is a state of anxiety produced when events and responsibilities exceed one's coping abilities (Lazarus & Folkman, 1984). The literature distinguishes between two broad types of stress: eustress [or stress which is positive and results in positive outcomes] and distress [or stress which is negative and results in negative outcomes]. As can be seen from the levels of stress reported, the participants experienced a considerable amount of stress suggesting they were distressed by WEFs.

#### 8.3.1.2. Anxiety

Anxiety emerged as the second highest type of NMHOs reported [ $M=3.35$ ,  $SE=0.12$ ]. Anxiety is a negative mood state that is accompanied by bodily symptoms such as increased heart rate, muscle tension, a sense of unease, and apprehension about the future (American Psychiatric Association, 1994; Barlow, 2002 as cited in Barlow & Durand, 2005). The literature abounds with examples that suggest that it is part of human nature to experience a certain level of anxiety. At times, anxiety seems to influence positive outcomes. The researcher learned that non-permanently employed academics need to go for a job interview on a per-semester or yearly basis to renew their work contracts. If temporary or fixed-term FAs are concerned about being hired again to continue with their academic work, then their anxiety levels can either rise or quickly escalate. Following a stressful event, people may experience some level of anxiety as part of the coping process. The extent to which people may experience anxiety varies from person to person and depends on whether the person experienced or perceived a stressful situation in a positive or negative way.

#### 8.3.1.3. Burnout

Burnout emerged as the third highest type of NMHOs reported [ $M=3.31$ ,  $SE=0.12$ ]. When individuals fail to cope with the stresses of their workloads demands, it becomes much harder to resolve their issues at an individual level. The immediate effects are increasing experiences of burnout. Burnout is "a state of complete emotional, physical and mental exhaustion" (Lunt et al., 2007: 102). The general concern around the concept of burnout is that it is primarily caused/triggered by overwork, and as has been established, the nature of academic work [e.g.,

on-going teaching, research and administration demands] in academia can easily make academics vulnerable to considerable occupational burnout. In a research study conducted by Bezuidenhout and Cilliers (2010), it has been found that burnout leads to increased cynicism and reduced professional efficacy. Cynicism denotes indifference or a distant attitude towards work. This refers more to the work itself rather than to personal relationships at work (Bezuidenhout & Cilliers, 2010: 8). Therefore, it is usually advised that people who are diagnosed with burnout due to overwork take a break or a complete rest from the activities contributing to their higher levels of burnout. Taking a break in academia may result in slow career growth for academics because of the KPAs set by the university. Hence for example P2 reported feeling quite distressed about the fact that her KPAs points for getting a promotion at UKZN were negatively affected following her taking maternity leave.

#### 8.3.1.4. Compassion Fatigue

Compassion fatigue emerged as the fourth highest type of NMHOs reported [ $M=3.03$ ,  $SE=0.11$ ]. Compassion fatigue is described as “occupational burnout that has been found to be particularly associated with caregiver stress and thought to occur as a result of providing ongoing empathy and compassion to others but neglect of one’s own self-care” (Rees et al., 2015: 2).

#### 8.3.1.5. Depression

Depression emerged as the moderately lowest type of NMHOs reported by the respondents [ $M=2.59$ ,  $SE=0.13$ ]. Depression is a common psychological illness, characterised by persistent sadness and a loss of interest in activities that the person would normally enjoy, accompanied by an inability to carry out daily activities (World Health Organisation, 2017b). The issue of mental illness stigmatisation makes it even harder for FAs to disclose their mental health illness because that might negatively influence their relationships at work and current/future work endeavours.

### **8.3.2. Building Blocks of Psychological Resilience [BBPRs]**

The findings discussed above specific to each type of NMHOs suggest that participants’ levels of NMHOs would be lower than what they reported if they related their WEFs experiences to

be more positive. In general terms, FAs experiences of WEFs are positively affected when their levels of neuroticism are decreased and their levels of mindfulness, self-efficacy, and coping are increased.

It is accepted that working people may constantly feel physically and psychologically/mentally exhausted because of the increased amounts of workloads they may need to perform, and when they fail to sufficiently take time off. Negative physical symptoms such as headaches, lack of energy, heavy eyes, as well as psychologically/mentally symptoms such as fatigue, irritability, and antipathy may be felt more frequently. In the case of FAs, for example, the person may feel an increasing need to sleep again even after having already taken out time for rest and relaxation. It is suggested that the person's feelings of restlessness may be short-lived and the feelings of physical, emotional, and mental fatigue may persist unless that person is able to solve the source of problems they face (Polat & İskender, 2018; Tahghighi, 2018). Furthermore, the situation may severely impair the ability to concentrate on work-related tasks and be productive because of being physically and emotionally drained. Even small tasks or activities that would normally be approached in a positive light, start to be approached in a negative light.

While the findings around participants' perceived levels of BBPRs appear to be relatively positive, the apparent high levels of NMHOs, along with the different concerns associated with BBPRs which were raised in the interviews, suggest that the results may be mediated by demographic participants' characteristics and academic/employment profile. The online survey of the study which has been assessed via the UKZN notice system website by all participants,<sup>25</sup> included definitions of the NMHOs and BBPRs concepts for the participants' own introspections and self-reflections around the meaning of these concepts when rating their responses. The possibility exists however that the participants may have related some, or all these concepts with experiences beyond the workplace environment. Positive results in those concepts which emphasise personal identify and personality are generally found in studies of women in the workplace. However, it should be noted that given the objectives of this study which aimed to explore biopsychosocial nature of resilience, the possibility exists that

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<sup>25</sup> See: Appendix D.

participants' experiences of resilience outside the workplace domain may have influenced the results. Since it became evident in phase-one and in phase-two of the study that WEFs were contributing to relatively high levels of NMHOs, a further effort was made to explore the relationships between WEFs, NMHOs and BBPPs and demographic characteristics, and the academic/employment profiles of the FAs in phase-two of this study.

It has also been an important aim of this study to explore solutions at the university level and provide recommendations for future researchers. The participants were thus asked to ponder the question of how management and HRM could support and promote their PR at work. Not surprisingly, the participants emphasised several relatively optimistic areas for improvement with a focus on their future at UKZN. Table 8.2 provides some insights of potential sources of WEFs-related NMHOs that interrelate with different BBPRs that might shed light on short-term and medium-term interventions by management and HRM to positively influence the PR of the FAs in the context of this study.

**Table 8.2. Potential BBPRs Areas of Improvement to Support UKZN's FAs' PR**

<b>BBPRs and average mean scores for this study [phase-one]</b>	<b>Definition of BBPRs concepts</b>	<b>Examples of BBPRs areas that can be improved to support the resilience of FAs [phase-two]</b>
Self-efficacy [Theme 13] [M=3.84, SE=0.09]	An individual's belief in his/her own ability to perform a selected task (Bandura, 1977).	<p><i>"So, it is not a case of not feel...or feeling a lack of confidence in my ability. I feel like I can do my job, I just feel like there are so many external factors that limit me from doing it as well as I would want to". [P1]</i></p> <p><i>"...[self-efficacy] it helps a lot because in this day and age there's not a lot of <b>people who are willing to help</b> so you have to be very independent as well...So definitely that <b>[self-efficacy] helped me to make the decision</b>, to even apply to do the interview and to eventually take up this post, it did help a lot". [P21]</i></p>
Coping [Theme 14] [M=3.72, SE=0.10].	A process of adjustment following an adverse event (Rees et al., 2015: 4).	<p><i>"...since 2018 I have been on a fixed term contract till now...<b>being permanent comes with specific benefits</b> if I can put it that way, <b>benefits that actually I think it could improve my resilience</b>". [P20]</i></p> <p><i>"I have found myself <b>digging very deeply within myself to cope</b> and there in comes the issue around resilience... it is a recipe for disaster and a complete soul-destroying experience <b>I think for women academics if this kind of support system doesn't exist</b>". [P24]</i></p>

Mindfulness [Theme 12] [M=3.34, SE=0.10]	Ability to attend to intentionally and maintain non-judgmental awareness of one's experience [thoughts, feelings, physical sensations] in the present moment (Reich et al., 2010: 472).	<p><i>"I personally feel like if I couldn't or if I had or I could master the mindful[ness] concept of everything, like what I do, it adds so much value to your work especially if you have to be so multi-dimensional like a woman, so it adds so much value because you are literally, I think...I think that if you really do manage to tap into that space where you are mindful, it makes things easier with multiple roles". [P15]</i></p> <p><i>"You cannot be focused working at home and taking care of children and doing all the other care duty, laundry, whatever responsibilities – it's simply impossible. <b>The fact that you are physically present in the home does not mean that you are mentally and cognitively present when you are working</b>". [P17]</i></p>
Neuroticism [Theme 11]	Tendency to experience enduring negative emotional states such as anxiety, guilt, anger, and depression more frequently, intensely, and readily, and for a more enduring period of time (Rees et al., 2015: 3).	<p><i>"So, those [NMHOs] are very much linked. So, the anxiety, that was the fact that you know that stupid system that we have, that performance management system, where I told you I was marked as being underperforming that caused hectic anxiety for me and I was spiralling down into this depression". [P2]</i></p> <p><i>"We have anxiety because of the work, we are guilty because of our families, we are bitter because of our experiences that we had in our undergrad training to become the professionals that we are, we are angry with the PhD and the system and the credentialing and the requirements of academia but we are also depressed that we don't have social lives". [P7]</i></p>

Table 8.2 illustrates how BBPRs and the PR of the participants can be impacted by the WEFs-related NMHOs, as discussed earlier in paragraph 8.3, and the possibilities for management and HRM at UKZN generating resilience-specific structures and interventions for female academic staff based on these findings.

A review of recent literature on PR demonstrates that people with high levels of PR are more likely to report exposures to significant life adversities (Connor & Davidson, 2003; Navrady, 2017; Rees et al., 2015; Scali et al., 2012). Therefore, experiencing resilience can be associated with experiences of neuroticism. Again, it should be noted that levels of neuroticism vary and depend on whether the person has a biological pre-disposition to stress and anxiety. Accordingly, this study also attempted to explore participants demographics characteristics. It is well-known from many studies that if people are biologically pre-disposed to negative levels of stress and anxiety, then people are more likely to experience higher levels neuroticism and potentially have a much harder time coping positively with adverse situations. According to Navrady (2017), age is associated with major depressive disorder, and being female further

increases the likelihood of clinical major depressive disorder, which is related to high levels of neuroticism. This is predominantly why the literature increasingly underlines the importance of having workplace systems in place to effectively monitor WEFs-related concerns that can potentially trigger or cause NMHOs in FAs, for example. In essence, it is recommended that HEIs establish resilience policy interventions and systems that promote positive levels of mindfulness, self-efficacy, and coping of FAs because these building blocks then serve as protective mechanisms that reduce the high levels of neuroticism experienced and lead to FAs responding more positively to WEFs-related concerns/adversities. In other words, if FAs levels of mindfulness, self-efficacy, and coping are maintained at positive levels, the negative effects of neuroticism are less likely to be more long lasting.

Ideally, people should not experience NMHOs because these are potentially health-threatening outcomes that can shorten an individual's lifespan. Increasingly, researchers in the field of psychology globally are advocating for a more active HRM role to promote resilience at work. However, there are differences between countries when it comes to putting in place resilience promoting initiatives for people at work. Some countries have guidelines in place for workplaces to develop resilience policies to meet the objectives of the workplaces and the needs of employees, whereas other countries are not up to speed with implementation of strategies/plans of such vital initiatives, or are not financially prepared to support such strategies/plans (Igiri et al., 2021; Marin et al., 2022; Sougou et al., 2022). The main reason behind some countries putting in place such initiatives is the increasing recognition that workplaces cannot flourish if employees are not mentally healthy. From a scientific and health and safety point of view, workplaces should have resilience-promoting initiatives in place to support the individual resilience of employees. At this point in time [and based on the results of the current study] there is considerable empirical evidence to support the argument that resilience policies in the context of HEIs may be most useful tools to effectively prevent NMHOs. Therefore, it is recommended that UKZN incorporates resilience training into existing occupational health and safety, mental health, and wellbeing training programme to positively influence the resilience of FAs when faced with adversities in both the work and home domains. The biopsychosocial approach to PR which influence current understandings of PR and BBPRs in this study is discussed in the next section.

#### **8.4. THE BIOPSYCHOSOCIAL DIMENSION OF RESILIENCE AND MANAGEMENT/HRM POLICY INTERVENTIONS**

There is a growing debate on whether specific measures such as resilience training programmes should be made optional, prescribed, or compulsory in workplace environments where the possibility is high that an employee may experience heightened NMHOs (American Heart Association, 2017; Monteverde, 2016; Van Breda, 2001; World Health Organisation, 2017a). This debate is timely and can be linked to the theories of biopsychosocial factors of resilience that were discussed in chapter four. From the discussion around the role of biopsychosocial [biological, psychological, and social] factors in the process of resilience, it has been learned that individual resilience can be influenced by both internal and external factors. A person's workplace environment, as an external or social factor, has the potential to either hinder or promote the person's levels of resilience.

The biopsychosocial dimension theory suggests that it is difficult to predict the type of response that a person may be expected to demonstrate when faced with an adverse situation. This is because a response is generally a reflection of the individual's biopsychosocial identity which has developed over time and reinforced by socially/environmentally-based forces (Lunt et al., 2007; Rees et al., 2015). Resilience trainings should be developed around topics that will deepen the person's understanding of their own predisposing factors, precipitating mechanisms, and progression mechanisms. When people undergo resilience training, ideally, they should go through a process of self-learning and deeper understanding of the self so that they can identify personal strategies that might suit their specific needs. Therefore, when workplaces have resilience policies in place and implement interventions such as resilience training, the management or HRM can, to some extent, predict the kind of resilience response that employees might demonstrate if faced with an adversity at work. This in turn may put management or HRM in a better position to identify, address, or prevent potential human resources issues that might lead to adverse outcomes for the organisation/institution. Based on the above, it can be asserted that the advantages and benefits of having resilience training [either optional or compulsory] outweigh any financial and human costs associated with the negative experiences or consequences of NMHOs.

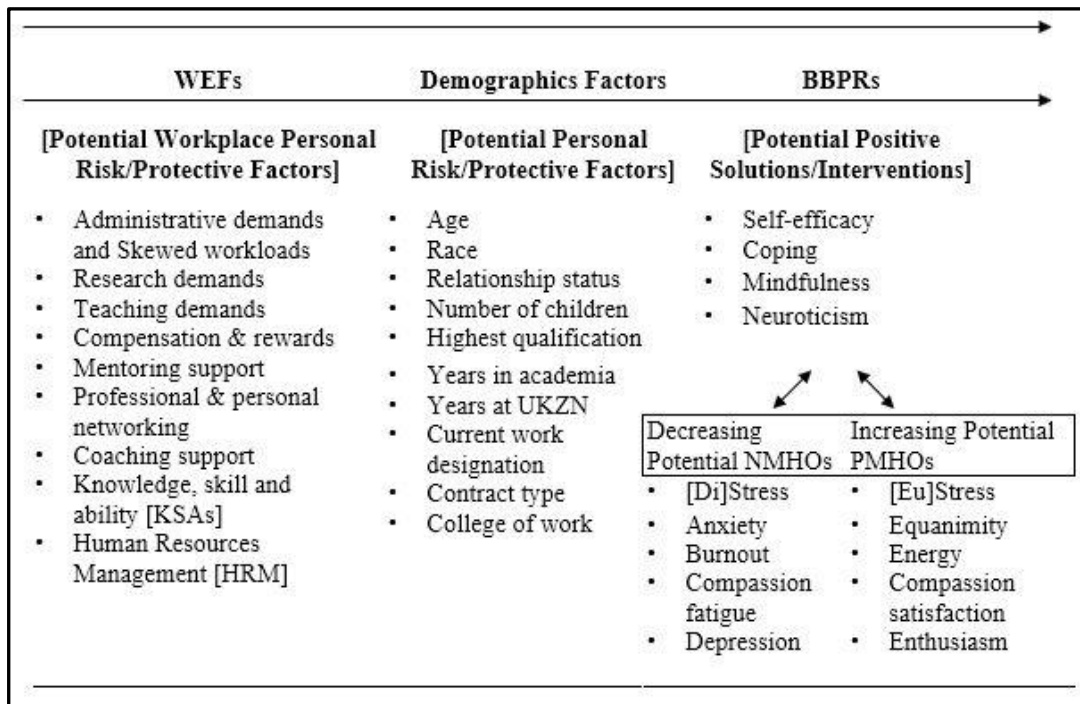
Increasingly, researchers increasingly acknowledge that to better understand how resilience can be promoted, one needs to use a multidimensional perspective. In other words, a person's reaction to events [perceived as adverse or not] generally reflects the dynamic interplay of multiple factors that affect human behaviour (Fulton et al., 2021; Lazarus & Folkman, 1984; Shrivastava & Desousa, 2016; Tahghighi, 2018). Resilience training should aim to make people aware of how their resilience is influenced by biological, psychological, and social-environmental factors. Researchers believe that the ability to demonstrate resilience comes with a better understanding of one's own unique personality traits, limitations, and strengths (Lazarus & Folkman, 1984; Mayer et al., 2016; Rees et al., 2015). Therefore, a better understanding of the interplay between biopsychosocial factors may positively influence the way the individual might react to future adverse events and prevent increased levels of NMHOs because of increased self-awareness and control. The next section presents a proposed framework that is derived from both the literature reviewed, and the findings uncovered in this study.

#### **8.4.1. Proposed Framework of Female Academics Psychological Resilience at HEIs**

In exploring the experiences of resilience of the participants in this study, different definitions were used as insights. A particularly insightful definition which was deemed to suit the nature of this study to promote the understanding of the experiences of the sample of this study was that proposed by Shrivastava and Desousa (2016: 38) which describes resilience as “the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state”. While delving into the specific explanations of WEFs-related NMHOs, the participants were also invited to reflect on the meaning of the concept of resilience based on their individual experiences of WEFs-related NMHOs at UKZN. It emerged that the absence of resilience literature that recognises that certain factors can hinder [as opposed to promote] not only resilience capacity, but also the mental health of women in HEIs, made it difficult for some of the participants to immediately resonate with the current resilience literature which proposes that adversity makes people stronger [i.e., more resilient].

Upon analysing the data and reflecting on the responses that emerged in the follow-up phase of the study [Theme 15], a new definition of resilience was developed. Therefore, in the context of the present study, psychological resilience is described not only as the ‘inner’

capacity by which people can endure adversity, but also the ability to recognise adverse situations in life that people cannot endure or control, and to consciously walk away from such situations to cope, survive, and protect mental health. Considering the importance of using Rees et al. (2015)'s model of resilience in this study, the literature of WEFs reviewed, and the findings uncovered in this study, a new framework for exploring WEFs affecting FAs' PR is proposed.



**Figure 8.2. Proposed Framework of Female Academics' Psychological Resilience at HEIs**

Figure 8.2 highlights the key factors [i.e., WEFs, Demographics Factors, NMHOs and BBPRs] that were crucial in exploring and understanding the experiences of resilience of FAs in the current research. It also illustrates how management and HRM at UKZN could potentially alter the experiences of FAs at UKZN from decreasing NMHOs, to enhancing positive mental health outcomes [PMHOs] by addressing potential WEFs and demographics risk factors.

## 8.5. CHAPTER SUMMARY

This chapter has provided a holistic and integrative interpretation of this research study's findings where the quantitative and the qualitative findings have been integrated to explain the extent to which the psychological resilience of FAs at UKZN have been negatively affected by WEFs at UKZN. In summary, the prior discussion illustrates the biopsychosocial nature of resilience and the importance of promoting the PR of FAs in South African HEIs. The discussion reveals that all eight WEFs explored in this study were contributing to FAs' experiences of levels of NMHOs. It also proffered an explanation as to why FAs experienced high levels of NMHOs due to WEFs, even though their self-perceived level of resilience was generally positive; why certain factors such as BBPRs, demographic characteristics were seen as either protective factors or risk factors to levels of resilience at UKZN; and why the FAs felt specific WEFs-related interventions from the management and HRM at UKZN could have contributed towards more positive mental health outcomes [PMHOs] and higher levels of resilience PR at UKZN.

Despite the apparent WEF-related adversities, some participants reported higher levels of resilience than other cohorts of participants. Such findings confirmed the model of individual workforce resilience by Rees et al. (2015), which proposed that resilience is influenced by the individual's biological, psychological, and social domains, whereby individuals score lower in neuroticism levels and higher in mindfulness, self-efficacy, and coping levels. The majority of the FAs reported a high level of WEFs-related NMHOs, especially in relation to teaching demands, research demands, administrative demands and skewed workloads, and compensation and rewards. This study found that WEFs-related adversities resulted in significant levels of stress, burnout, anxiety, and compassion fatigue for FAs who experienced enduring WEFs-related adversities, than among FAs who did not experience significant WEFs-related adversities. The results also indicated that FAs who reported NMHOs to the above WEFs were more likely to experience a substantial amount of NMHOs in relation to other WEFs, such as knowledge, skill, and ability [KSAs], professional and personal networking, coaching support, and mentoring support. The results suggest that the lack of perceived KSAs, networking and support may predict perceived NMHOs. Interestingly, this study found that WEFs-related NMHOs partly correlates to the demographic profiles of FAs such as age, race, relationship status, number of children, level of qualification, tenure within the industry and

the institution, appointment designation, employment contract, and home college at the institution. In this regard, the study argued that overall, FAs' level of PR is likely to be much higher if they feel their WEFs-related adversities are minimal. In other words, the PR of FAs depends not just on their biological, social, psychological, and individual factors, but also on how well they interact with their work environment. The noted high reported levels of NMHOs findings make it imperative for UKZN's top level management and human resource management [HRM] to take cognisance of the need to promote the PR of UKZN's FAs workforce. It can be concluded, therefore, that not only can these negative outcomes have dire implications to FAs' overall mental health and wellbeing, but they can also have negative implications to UKZN's bottom line and current strategic plan of "inspiring greatness".

The original contributions, procedures followed to address the study's research questions, limitations/delimitations and applicable recommendations, based on the overall aim, objectives, and results of this study, are presented in the next final chapter of the thesis.

## **CHAPTER NINE**

### **THESIS CONCLUSION**

#### **9.1. INTRODUCTION**

The aim of this study was to explore workplace environmental factors [WEFs] affecting female academics [FAs] psychological resilience [PR]. To attain this aim, a mixed method sequential explanatory design which consisted of a quantitative phase [phase-one] and a qualitative phase [phase-two] was employed. A mixed methods sequential explanatory design was used so that the FAs participants of this study could explain and contextualise the quantitative phase results during an in-depth, semi-structured interview in the [follow-up] qualitative phase. To reiterate, the study quantitative research [phase-one] objectives were as follows:

- i. To describe the general perceived level of psychological resilience among female academics within the context of their workplace environment.
- ii. To determine the workplace environmental factors that are identified as the highest contributors of experiences of negative mental health outcomes among female academics.
- iii. To ascertain the extent to which female academics do experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors.
- iv. To establish the extent to which female academics do experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment.
- v. To investigate the possible relationships that may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.

The study qualitative research [phase-two] objectives were as follows:

- i. To understand and interpret how female academics describe their perceptions or lived experiences of their own psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience.
- ii. To inform recommendations of possible interventions to the South African higher education institutions management and human resources management that aim to support/promote psychological resilience and prevent/manage experiences of workplace environmental factors-related negative mental health outcomes among female academics.

The research findings emerging from the quantitative phase and qualitative phase were reported/presented in chapters six and seven of this thesis, respectively. The integration and discussion of the findings from both phases of this study were provided in chapter eight. This concluding chapter of the thesis is organised into seven sections that combine to emphasise the significant contributions made by this study to the literature of psychological resilience of FAs.

The chapter first discusses the study's conceptual/theoretical, methodological, and empirical contributions. This is followed by a detailed outline of the practical implications of the study. Next, the information required and procedures to answer the research questions in this research project are explained. The specific limitations and delimitations identified during the process of undertaking this research study are also acknowledged. To conclude this chapter, and in accordance with the findings uncovered in this study, a set of recommendations for UKZN's management and HRM and future research are offered in the final two sections of this chapter.

## **9.2. MAIN CONTRIBUTIONS OF THE STUDY**

This study makes the following [original] methodological, empirical, theoretical/conceptual contributions:

### **9.2.1. Methodological Contributions**

This study is unique as it is the first to investigate the WEFs affecting FAs' PR in the context of SA's HEIs, employing a mixed method sequential explanatory design. From a methodological perspective, this study demonstrates how a research study project exploring factors influencing PR in the workplace context can meaningfully contribute to scientific evidence. The study did so by employing a mixed method sequential explanatory approach, within the pragmatism paradigm, to collect, analyse, and report research data. Specifically, and to reiterate, this study comprised of a quantitative phase [or phase-one] and a qualitative phase [or phase-two]. The use of a sequential explanatory design meant that this study was designed to include a two-phase data collection process, with phase-one being executed following the data collection/analysis process in phase-two. This process was critical as it informed what salient findings/results needed further inquiry in a follow-up phase-two. Using pragmatism as a research paradigm/philosophy in this study was relevant, as it emphasises the importance of researchers identifying and using the most suitable methodological approach to investigate specific research phenomena. It was conceded that employing a mixed method approach in the current study would contribute towards providing a more complete picture of the research subject, as opposed to employing either a quantitative approach or a qualitative approach [given the paucity of studies exploring WEFs affecting FAs' PR in the context of SA's HEIs]. Therefore, this study contributed towards a new mixed method inquiry to explore WEFs affecting PR of FAs in the context of the HEIs. Specifically, this study made the following isolated methodological contributions.

Firstly, this study has contributed to the development of a quantitative data collection instrument [questionnaire] to use in a university workplace environment setting. The questionnaire was tailored to allow the researcher to explore the various factors/concepts identified in the literature, using a sequential explanatory design. Purposely, this study's quantitative data collection instrument was designed to include 12 demographic factors, 25 items from the original Connor-Davidson Resilience Scale [CD-RISC] (Connor & Davidson, 2003) [which were slightly modified to reflect the UKZN context], 8 key WEFs in the context HEIs identified in the literature review, 5 NMHOs and 4 BBPRs [identified in the model of individual workforce resilience developed and recommended by Rees et al. (2015)]. Definitions of NMHOs and BBPRs concepts were included in the questionnaire to provide

some clarity of the key concepts of the study, but also to yield more reliable data from the respondents.

A further important contributing factor in effectively conducting phase-one of the study, was to use the online QuestionPro platform to gather data online. The sampling was done by posting participation requests on the UKZN notice system website with a direct link to the online questionnaire where potential participants were provided with a written explanation about the purpose of the study, what their participation entailed, and consent to participate in this study. In the last part of the questionnaire, the researcher included a short message with an appeal to respondents to consider volunteering for a follow-up interview with the researcher to provide some context to their self-rated survey responses. The quantitative data gathered through the online survey, was analysed using the statistical computer software package STATA, and from which relevant descriptive and inferential statistics were calculated.

The second major methodological contribution made by this study was the development of a new qualitative one-on-one interview schedule to collect qualitative data in phase-two of the study. The interview schedule is unique in that it was specifically designed to help explore/explain perceptions and experiences of resilience in a university workplace environment setting in general. This research instrument was to help explain in more depth the results uncovered in phase-one of this study. Given the chosen population and workplace environment context of this study, it was essential and key to include in the interview schedule, a question that would also attempt to capture how FAs perceived the roles of their UKZN's management and HRM in their specific circumstances of PR experiences at UKZN. This specific interview question was formulated vis-à-vis participants' stories of WEFs-related NMHOs shared at the start of the one-on-one interviews.

Regarding the method used to collect qualitative data, the researcher used the Zoom online video-conference platform to individually interview FAs who volunteered, and met the criteria to participate in the qualitative phase. All the interviews were tape-recorded and transcribed verbatim to capture the FAs' PR experiences/perceptions. The interview data transcripts were analysed following the thematic analysis process/steps as listed in chapter five, aided by the qualitative data analysis software package, NVivo, Version 12 (Braun & Clarke, 2021;

Campbell, 2020). Through this process, phase-two of the research study contributed to new insights which could not be explored in phase-one. This suggests that sequential explanatory designs in mixed method studies might contribute towards generating verifiable evidence on the research problem, as was the case in the current study. A further indication of the importance of using mixed method design in this study was shown by integrating the research sample in both phases of the study, and integrating the findings of the quantitative and qualitative phases of the research in the analysis and discussion in chapter eight. As a result, by using a mixed method approach to promote understanding of the WEFs affecting FAs' PR, this study might contribute to the outcomes of new PR policies/interventions [and/or adapting existing PR policies] in the context of SA's HEIs.

### **9.2.2. Empirical Contributions**

By employing a mixed method approach, this study sought to empirically provide a mixed method picture of the subject of WEFs affecting FAs in the context of UKZN. Based on the literature examined in the literature review chapters, this study argued that the extant research on FAs in the South African HEIs context focused specifically on issues such as gender equity/equality, work-life balance, and academic performance/productivity output. It further argued that the question on the extent to which HEIs' WEFs contributed to experiences of PR for FAs in SA was largely under-researched, despite the growing recognition of the importance of resilience in SA's HEIs. By undertaking this study, the researcher provided empirical indicators for the potential links between WEFs and PR in the context of SA's HEIs, but importantly, an opportunity to empirically identify/understand which specific WEFs were perceived or experienced as the highest contributors of NMHOs by FAs.

The five [5] specific empirical contributions offered by this study are as follows:

- i. The study generated meaningful empirical evidence on the types of WEFs that affect FAs' PR and their negative impact on FAs' mental and physical health. For example, this study revealed that experiences of WEFs have contributed to high levels of NMHOs [as opposed to PMHOs] for the vast majority of this study's participants, and in some cases also led to negative physical health outcomes.

- ii. The study's second major empirical evidence which further confirmed the above results that WEFs negatively affected the PR of FAs in this study, was that each of the specific types of NMHOs investigated in this study were scored above the average score. This set of findings emphasised the potential issue of mental health of FAs at UKZN that suggests the need for pragmatic management and HRM interventions.
- iii. The study revealed that FAs' perceived level of psychological resilience assessed through the adapted 25 items Connor-Davidson Resilience Scale [CD-RISC] by Connor & Davidson (2003), and the BBPRs [neuroticism, mindfulness, self-efficacy, and coping] proposed by Rees et al. (2015) were reported in a positive light, despite FAs' self-reported high levels of WEFs-related NMHOs. This result suggests that WEFs and personal factors interact to predict how participants rate themselves in terms of resilience (Fulton et al., 2021). The findings suggest that FAs drew on personal beliefs, values, and experiences when reflecting on their own understanding and self-assessment of being resilient.
- iv. A noteworthy contribution of this empirical study was to show the possible relationships/differences between FAs' demographic factors and their perceived level of psychological resilience, WEFs, NMHOs and BBPRs. To the researcher's knowledge, none of the existing research studies have investigated the relationships between these factors among FAs in South African HEIs. Hence, these findings could serve management/HRM practitioners in SAs HEIs well, by having a better understanding of how FAs experiences of PR and WEFs-related NMHOs vary in terms of demographic factors. That can help identify different approaches which would best address different/specific individual resilience needs of FAs.
- v. Lastly, the study has demonstrated that university management and HRM can hinder or support the experiences of PR of FAs via its policies and practices. For example, this study found that, to a considerable extent, the research and teaching work-related challenges faced by FAs originate from having to work on increasingly time-consuming administrative demands and skewed workloads. A manager can promote FAs resilience by providing adequate and timely support in order to free up time spent on

administrative demands and skewed workloads so that FAs can engage more meaningfully in core research and teaching activities. This in turn could reduce levels of NMHOs and promote a positive sense of resilience.

### **9.2.3. Theoretical and Conceptual Contributions**

This thesis makes two theoretical contributions and two conceptual contributions to the body of knowledge of PR and HRM in the context of HEIs. Theoretically, the study has attempted to bridge the gap in the literature by showing that there are several WEFs that negatively affect the FAs' experiences of PR. Furthermore, the thesis has offered possible insights as to how some of the fundamental WEF-related issues uncovered in this study could be addressed. In this context, the prime variables/concepts reflected in the overarching research questions explored in this study, provide a synopsis of the original theoretical contributions made by this study.

The second theoretical contribution by this study was re-ordering and discussing the WEFs as per the phase-one's fieldwork results [chapter six]. This thesis has shown that the ordering of WEFs as captured in the literature review [chapter two] is different from the ordering of WEFs as emerged in this study's fieldwork. For example, the study findings indicated that certain WEFs [i.e., administrative demands and skewed workloads; research demands; teaching demands; and compensation and rewards] emerged as the highest contributors of NMHOs among FAs as compared to other WEFs [i.e., mentoring support; professional and personal networking; coaching support; knowledge, skill, and ability [KSAs]. In doing so, this thesis has shown that in the context of UKZN, different FAs perceive and experience WEFs-related NMHOs and PR differently.

In terms of conceptual contributions, this study recognised and acknowledged the lack of awareness around the issues of WEFs affecting FAs' PR by proposing a new definition or conceptualisation of PR and WEFs. While the thesis conceptualised PR as the 'inner' capacity of how people can endure adversity, it is also the ability to recognise adverse situations in life that people cannot endure or control, and must consciously walk away from such situations to cope, survive, and protect their mental health. It further conceptualised WEFs as those internal and/or external factors that may either promote or hinder the PR of people in workplace

environment settings. These proposed definitions are in light of the study's phase-two results that revealed that WEFs can result in either NMHOs or PMHOs.

The most notable second conceptual contribution from this study was in developing a new conceptual framework for exploring/understanding the topic of WEFs affecting FAs' PR. Originally, this study was guided by the model of individual workforce resilience by Rees et al. (2015), as a conceptual/theoretical framework. However, it ended up with a new proposed conceptual framework [see Figure 8.2: Proposed Framework of Female Academics Psychological Resilience at HEIs]. Although in principle both frameworks have biopsychosocial grounding, they differ largely in terms of the different WEFs and scenarios used to describe and interpret the meaning of resilience. The proposed conceptual framework was designed to contain WEFs, demographic factors, BBPRs, HRM, NMHOs and PMHOs, based on the knowledge gained from the literature review and the study's fieldwork data. Specifically, the new framework is different in that it draws on WEFs in the context of HEIs. Secondly, it introduces demographic factors as intermediate factors of PR. Finally, it introduces PMHOs concepts that can be used as guide to develop and evaluate HRM resilience-related policies or interventions that focus on addressing NMHOs and promoting PR. Although these considerations make the proposed framework a more complex model which is specific to the HEIs/UKZN and FAs context, this model could be used and adapted to reflect different workplace environment contexts and occupational groups. It is hoped therefore that this framework may serve as a catalyst for the development of further theoretical/conceptual insights in future research studies within and beyond the HEIs context.

### **9.3. PRACTICAL IMPLICATIONS**

As reflected in the previous sections, the current research makes relevant methodological, empirical, and conceptual/theoretical contributions, and as such, has practical implications for management and HRM in HEIs. The findings that emerged from this study challenge the general assumption that adversity makes people stronger [i.e., more resilient]. This study illustrated how several WEFs [teaching demands; research demands; administrative demands and skewed workloads; knowledge, skill, and ability [KSAs]; professional and personal networking; coaching support; mentoring support; and compensation and rewards] were identified as factors contributing to negative experiences of PR for FAs at UKZN.

Promoting FAs' PR is something that should take place at different levels in the institution. It is imperative that stakeholders at different levels at UKZN recognise the serious ripple effect of experiences of WEFs-related NMHOs by one FA. From the outsider's point of view, when a FA is faced with WEFs-related NMHOs, it may appear as if the situation is theirs alone to deal with, and that they do not impact other people. However, as evidenced in this study, adverse WEFs can contribute to NMHOs and physical health issues. That means that those people who may interact with the affected FA [e.g., colleagues at work, friends, and family members] may also [to some extent] be affected by the FA's negative mood and demeanour because of issues that the FA might be going through. Therefore, from a practical point of view, it suffices to say that both FAs and HEIs would benefit from having follow-up structures and intervening systems available that oversee and red-flag negative experiences of resilience among FAs, and offer practical solutions on reported WEFs-related adversities before serious NMHOs develop.

#### **9.4. SYNOPSIS OF THE PROCEDURES FOLLOWED TO ANSWER THE RESEARCH QUESTIONS**

The above discussed original contributions and practical implications of this study transpired because of the research questions posed in this study. Therefore, it is important to reiterate the main research question explored in this study with a synopsis of the procedures that facilitated answering the research questions.

##### **9.4.1. Quantitative Phase Research Questions**

The following five [5] research questions were answered in the first phase of the study by an average of 135 FAs respondents:

- i. *What is the general perceived level of psychological resilience among female academics in the context of their workplace environments?* To answer this question, the 25 items from the original Connor-Davidson Resilience Scale [CD-RISC] (Connor & Davidson, 2003) were slightly modified and employed to assess the general perceived level of psychological resilience among female academics at UKZN. All 25 items were rated on a 5-point Likert-scale ranging from "not true at all" [1 point] to "true nearly all the time" [5 points] as in the original CD-RISC scale. Each item was a

short statement that described the general perceived level of psychological resilience among female academics in the context of working at UKZN [for example, “I know where to turn for help during stressful times at UKZN” “I feel in control of my work-life at UKZN”]. These items were grouped into five resilience factors [for easiness of presentation and interpretation] namely notion of personal competence, high standards, and tenacity [factor 1]; trust in one’s instincts, tolerance of negative affect, and strengthening effects of stress [factor 2]; positive acceptance of change, and secure relationships [factor 3]; relates to control [factor 4]; spiritual influences [factor 5] (Connor & Davidson, 2003: 80).

- ii. *What workplace environmental factors do female academics identify as the highest contributors of their experiences of negative mental health outcomes?* This question was answered by first reviewing the literature in chapter two, to ascertain which WEFs potentially contributed to FAs experiences of NMHOs within the South African HEIs context. The WEFs that were identified in the literature review were: teaching demands; research demands; administrative demands and skewed workloads; knowledge, skill, and ability [KSAs]; professional and personal networking; coaching support; mentoring support; and compensation and rewards [see: chapter two]. These WEFs were then included in the survey, asking participants to rate on a scale from 1 [to little or no extent] to 5 [to a great extent], the extent to which each WEF contributed to their experiences of NMHOs at UKZN.
- iii. *To what extent do female academics experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors?* To answer this question, the researcher used the model of individual workforce resilience developed and recommended by Rees et al. (2015) for professional groups working in highly stressful settings. This model captured key NMHOs that are experienced among the academic working population. The NMHOs included: burnout, depression, anxiety, stress, compassion fatigue, and were deemed suitable for the context of this study of resilience among FAs in HEIs [see: chapter three]. The participants answered this question by indicating the extent to which they

suffered each of these NMHOs at UKZN, using a scale from 1 [to little or no extent] to 5 [to a great extent].

- iv. *To what extent do female academics experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?* The model of individual workforce resilience by Rees et al. (2015) was also used in this study, as part of answering the fourth research question. The proposed model included pertinent biopsychosocial factors of resilience [or BBPRs] namely: neuroticism, mindfulness, self-efficacy, and coping [see: chapter four]. The participants answered this question by indicating the extent to which they experienced each of these BBPRs at UKZN, using a scale from 1 [to little or no extent] to 5 [to a great extent] [see: chapter six].
- v. *What possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors-related negative mental health outcomes, and building blocks of psychological resilience?* In the process of interviewing the participants in phase-two of the study, the researcher learned that several participants' demographic factors were relevant to this study, and were [to some extent] correlated to participants' experiences of resilience at UKZN. It was vital to revisit the quantitative data and conduct a bivariate analysis of the quantitative data to investigate whether there were relationships between demographic factors and the participants perceived level of psychological resilience, WEFs, NMHOs and BBPRs. The findings revealed that the participants perceived levels of psychological resilience, WEFs, NMHOs and BBPRs differed across their demographic characteristics and academic/employment profile [see: chapter six, section 6.3].

#### **9.4.2. Qualitative Phase Research Questions**

At the end of phase-one, 27 participants who volunteered to participate in the second phase of the study were contacted and interviewed to answer the following two [2] follow-up research questions:

- i. *How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?* This question was answered by providing each participant with a copy of their individual self-rated survey responses, and asking them follow-up questions to give a full account of how WEFs affected participants PR.
  
- ii. *How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?* The study's phase-two was designed keeping in mind the workplace environmental context [i.e., UKZN] within which FAs in this study functioned. Given the nature of this study, it became a vitally important objective of this study to explore potential interventions to support/promote FAs' PR to prevent/manage WEFs-related NMHOs among FAs. The answers to this question were sought from the participants' own perspectives. The data from phase-two provided evidence that the UKZN's management and HRM support was fundamental to support/promote FAs' PR. Many of the FAs felt that UKZN's management and HRM's failure to address their WEFs-related NMHOs were also fundamental stumbling blocks in their positive experiences of PR. It was most useful to include this question in the study's phase-two so that FAs' felt free to use their own words to share their personal experiences or views. This in turn helped the researcher gather more detailed insightful data from the participants that could elicit HRM resilience-related policies [interventions recommendations and guidance] to help support/promote FAs' PR.

## **9.5. LIMITATIONS AND DELIMITATIONS OF THE STUDY**

This study was designed to help shed some light on the WEFs affecting PR among FAs in SA's HEIs. However, key limitations and delimitations applicable to this study were identified and require acknowledgement.

### 9.5.1. Limitations of the Study

This study encountered five [5] main limitations:

- i. This study used a mixed method approach to explore the subject of WEFs affecting FAs' PR. It is acknowledged that using a mixed method approach was valuable, allowing this study to draw from the strengths of both *the* quantitative and qualitative approaches to present a detailed picture of the research subject, as part of the overarching aim of this study. However, conducting a mixed method approach with two distinct phases, inevitably resulted in the researcher producing a longer than expected thesis [viz., in terms of the number of words in the thesis] considering the nature of this study, and the overall 42-hour interview recording time.
- ii. Related to the above identified limitation, the current study aimed at exploring WEFs that adversity affect FAs' PR; and therefore, the analysis and reporting of findings focused greatly on WEFs-related NMHOs, and not on WEFs-related PMHOs.
- iii. To comply with the gatekeeper's instructions to not contact potential participants directly to gather data, the researcher posted a few notices of the study on the UKZN notice system website and waited for FAs who visited the website to complete the web-based questionnaire. The auto-selection nature of online surveys may have resulted in potential FAs participants not seeing the few notices of this study posted on the UKZN notice system website. This may also have resulted in potential FAs participants having seen the study notices, but either not having the time or inclination to take part in the study.
- iv. This study was conceptualised and commenced before the Covid-19 pandemic first hit and the lockdowns began in South Africa. However, the data collection process took place during the hard lockdowns in South Africa, using an online questionnaire, due to the health regulations and protocols issued by the Research Office of the University of KwaZulu-Natal, that no physical contact be allowed between the interviewer and the interviewees. It is possible that the participation rate in both phases of the study might have been higher if there was no Covid-19 pandemic or lockdowns. Nevertheless, it is

recognised that this study had surveyed a suitable number of participants in terms of exploring and addressing the research questions in this study.

- v. The final study limitation also influenced by the Covid-19 pandemic, was that the qualitative data collection [phase-two] took place online via the Zoom video-conferencing platform and therefore depended on a reliable internet connection and a stable electricity supply. The fact that there were internet connectivity issues and electrical power cuts [load-shedding] challenges when some of the interviews took place, meant that potential insights were not captured during the interview process.

### **9.5.2. Delimitations of the Study**

The study was delimited by the following two [2] key factors:

- i. The study was designed to include only FAs at UKZN. Other members of staff at UKZN [e.g., male academics, support staff, management staff] were not included in the current study.
- ii. This study was conducted in one single South African HEI, namely UKZN, so it was only possible to generalise the findings to the population of FAs at UKZN and not to other HEIs in SA. Although in terms of perceived limitations, there may be a valid argument about making generalisations to the South African population of FAs, this study has illustrated or reflected issues that might be experienced by FAs in other South African universities as evidenced in some of the literature surveyed [which indicate general trends of WEFs-related NMHOs because universities may apply similar policies and practices].

### **9.6. RECOMMENDATIONS FOR UKZN MANAGEMENT AND HRM**

In the light of the notable [quantitative and qualitative data] findings uncovered in this research project, management/HRM at UKZN should treat these findings as serious points of reflection to assess how WEFs-related issues faced by FAs can be addressed at the level of management/HRM at UKZN. To help prevent/reduce WEFs-related NMHOs faced by FAs

and support/promote PR in FAs going forward, management/HRM at UKZN should take into consideration the following ten [10] recommendations:

- i. Reduce the administrative demands and skewed workloads, research demands, and teaching demands, as these were found to be highest contributors of NMHOs faced by FAs. This can be done through reviewing current workload allocation policies, practices, and formulations, to ensure that FAs workloads are manageable, and to ensure that increases in workload or adjustments to the pace of work do not affect FAs in a negative way.
- ii. Make resources available to help FAs cope with administrative, teaching, research demands, and where applicable hire junior academics to assist senior academics. This will help keep levels of NMHOs and neuroticism under control by ensuring stress levels due to work overload do not exceed FAs' internal coping capacity. Furthermore, it should be taken into account that there was very little difference in the level of workload or workload pressures between non-permanent and permanent FAs lecturers in this study.
- iii. Revisit the existing compensation and rewards model and provide improved work benefits for non-permanent FAs lecturers/researchers and a better work environment.
- iv. Develop and implement a well-designed work-life balance policy which recognises that work-life balance support from work influences resilience at work. Female academics who become mothers during their academic career, are more likely to be disadvantaged by performance evaluations metrics for maternity time off or childcare duties [which are perceived to contribute to slow career progression for FAs].
- v. Create a feedback confidential system which encourages FAs to share personal work-life balance experiences, add input, and make suggestions of strategies aimed at achieving a balanced work-life and career growth.
- vi. Make available mentoring and coaching support programmes for all FAs irrespective of tenure at UKZN, work designation and type of contract. Mentoring and coaching

support programmes should be designed to increase the knowledge, skill, and ability [KSAs] of FAs [especially new academics] in relation to their jobs. Management/HRM should take advantage of the current diversity of academic experts available at UKZN and identify more senior academics from different academic fields within the UKZN, with the KSAs and motivation to play the roles of mentors and coaches.

- vii. Scale up efforts to support FAs' self-development by incentivising digital professional and personal networking support programmes. Take particular advantage of the digital technologies available to explore innovative ways to promote professional and personal network support programmes, with especial attention given to the lessons learned during the Covid-19 global pandemic and associated social distancing protocols/lockdowns. This may help promote levels of mindfulness, self-efficacy, and coping abilities that FAs may need around administrative, research, and teaching work areas.
- viii. Identify potential factors that affect FAs' resilience at work, identifying areas where resilience support/intervention is needed for specific demographic groups of FAs, and identify those FAs who may be more vulnerable to WEFs-related NMHOs and in greater need of individualised or personalised resilience support/interventions at work.
- ix. Promote levels of resilience among FAs to minimise the long-term impact of NMHOs. Management/HRM should consider creating new innovative policies and practices, and by investing in specially designed resilience training programmes where academics are offered comprehensive guidance and practical tools for dealing with potential WEFs-related adversities in academia.
- x. Address issues of personnel capacity at the Management/HRM level. Management/HRM personnel should also be capacitated to understand how WEFs-related adversities affect the resilience of FAs. Management/HRM staff should be able to get to the bottom of the concerns brought to their attention and respond swiftly to those concerns. They should approach issues sensibly by listening to what is happening

with FAs on the ground and then respond swiftly to those concerns as these might make a significant difference to FAs' experiences of resilience.

## **9.7. RECOMMENDATIONS FOR FUTURE RESEARCH**

The insights provided by this current study, as well as the limitations and delimitations outlined in section 9.5, suggest possibilities for future research on the topic of HEIs' WEFs and PR of FAs. The following seven [7] recommendations for future research are thus offered:

- i. There should be other studies undertaken in the same area which will employ the same methodological approach and methods to assess the extent to which similar results would be discovered.
- ii. Considering that there were also some indicators that the participants in this study experienced WEFs-related PMHOs, future research should aim to explore the extent to which the WEFs explored in this study might affect FAs' PR positively.
- iii. Future studies should include other groups within the workforce to explore differences in experiences or perceptions of PR to compare and contrast the perceptions and experiences of resilience among different categories of employees working in the same institution.
- iv. Similar research should be conducted by adding a third data collection phase to assess university management staff and HRM practitioners' perspectives on WEFs affecting FAs' PR. This future research could offer opportunities for university management staff and HRM practitioners to describe the most common WEFs concerns which are brought to their attention by FAs. It could also illuminate what HRM resilience-related policies or measures might already be in place [or needed] to address FAs' WEFs concerns and support/promote FAs' PR going forward.
- v. Given that this study focused only on the University of KwaZulu-Natal [UKZN], it is further recommended that future researchers attempt similar studies on a larger scale,

involving FAs from other universities within South Africa, as well as within other HEIs across the African continent, and, HEIs outside the African continent.

- vi. Given that this study indicated insightful differences of FAs' PR experiences based on participants' demographic characteristics, it is recommended that more research should be conducted to investigate the extent to which demographic factors mitigate the adverse impacts of WEFs on FAs' PR in HEIs workplaces.
- vii. The potential impact of the Covid-19 pandemic on the experiences of resilience for FAs cannot be overlooked. This study was designed and began as a pre-pandemic research project. Although data collection took place post-pandemic, an attempt was made to focus on the original aim of the study as much as possible. Future similar studies should be extended to include WEFs-related adversities faced by FAs that might be specifically caused by or exacerbated by the Covid-19 pandemic.

## **9.8. CONCLUSION**

The aim of this study was to explore the workplace environmental factors affecting female academics' psychological resilience, using a mixed method study sequential explanatory design. The objective of this final chapter of the thesis was to provide an overview of the conceptual/theoretical, methodological, and empirical contributions made by conducting this research project, as well as outline its practical implications. The main procedures that were followed to address/answer the research questions in this study were described in detail. The chapter also acknowledged/highlighted the limitations and delimitations related to the study. The chapter [and study] was brought to a conclusion by offering important recommendations for UKZN management and HRM, and making recommendations for future research in light of the findings uncovered in the study.

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# APPENDIX A

## GATEKEEPERS APPROVAL LETTER



6 May 2019

Mrs Nuria Leandra de Jesus Cadete (SN 211560754)  
School of Management, IT and Governance  
College Of Law and Management Studies  
Westville Campus  
UKZN  
Email: [211560754@stu.ukzn.ac.za](mailto:211560754@stu.ukzn.ac.za) [nuriacadete@hotmail.com](mailto:nuriacadete@hotmail.com) [Ruggunans@ukzn.ac.za](mailto:Ruggunans@ukzn.ac.za)

Dear Mrs Cadete

### RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

*"Exploring Workplace Environmental Factors Affecting Female Academics' Psychological Resilience: A Mixed Methods Sequential Explanatory Study".*

It is noted that you will be constituting your sample as follows:

- by performing in-depth interviews with female academics on all five Campuses.
- with a request for responses on the website. The questionnaire must be placed on the notice system <http://notices.ukzn.ac.za>. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to ([govenderlog@ukzn.ac.za](mailto:govenderlog@ukzn.ac.za)) or ([ramkissoob@ukzn.ac.za](mailto:ramkissoob@ukzn.ac.za)).

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express

#### Office of the Registrar

Postal Address: Private Bag X54001, Durban, South Africa

Telephone: +27 (0) 31 260 8005/2206 Facsimile: +27 (0) 31 260 7824/2204 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za)

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100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

## APPENDIX B

### INFORMATION SHEET AND CONSENT TO PARTICIPATE IN RESEARCH



**Research Title: Exploring Workplace Environmental Factors Affecting Female Academics' Psychological Resilience: A Mixed Methods Sequential Explanatory Study**

Date: 27 February 2020

Dear Prospective Participant

Please read the Information Letter and choose if you would like to proceed.

My name is Nuria Cadete. I am undertaking a PhD at UKZN [School of Management, IT and Governance], on the topic of psychological resilience of female academics. The purpose of this study is to explore workplace environmental factors affecting female academics' psychological resilience.

Academics in general are known for their role in generating and disseminating knowledge and perform work that is important to the society. Empirical research continually suggests that men and women deal with experiences of stress and display resilience in different ways. However, a significant aspect of psychological resilience that has not been extensively researched in South Africa, is the quality of psychological resilience of academics [i.e., female academics]. One of my main interests in undertaking this project, is to develop a psychological resilience framework for use in the context of the academic workplace in South Africa, since it is recognised that adverse experiences affect a person's mental, physical, social wellbeing, and their productivity. If you are a female academic at UKZN, your participation may help us begin to better understand psychological resilience of female academics in South Africa.

I have some understanding of the constraints on your time as an academic, and I appreciate the effort required to participate in an activity such as this. However, as a female academic, participation in this study would afford you the opportunity to provide valuable inputs [based on your personal experience] on workplace environmental factors affecting your psychological resilience. In this way, your participation in this study will also help in the design of Human Resources Management programmes which are effective in promoting resilience of working women in academia.

### **What participation involves:**

The study has been designed based on a mixed methods sequential explanatory approach, and will consist of two distinct phases, providing a more complete exploration of workplace environmental factors affecting psychological resilience of female academics. If you do agree to take part in this study, you will be invited to take part in phase-one, phase-two or both phases.

#### **Phase-one**

In phase-one you will be invited to fill-in an on-line questionnaire which will take approximately 10–15 minutes. The on-line questionnaire seeks to answer the following five main research questions:

- i. What is the general perceived level of psychological resilience among female academics in the context of their workplace environments?
- ii. What workplace environmental factors do female academics identify as the highest contributors of their experiences of negative mental health outcomes?
- iii. To what extent do female academics experience negative mental health outcomes such as stress, depression, anxiety, burnout, and compassion fatigue due to workplace environmental factors?
- iv. To what extent do female academics experience building blocks of psychological resilience such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?
- v. What possible relationships may exist between female academics' demographic factors and their perceived level of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?

#### **Phase-two**

In phase-two you will be invited to take part in a remote interview with me to help explain, or elaborate upon, the quantitative results obtained in phase-one. The remote interviews may be

conducted using one interview method of your preference, which may include: online platform interviews (Skype or Zoom), telephone interviews, or e-mail interviews/open-ended surveys.

The remote interview may take approximately 30–45 minutes, and will be guided by the following two main research questions:

- i. How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?
- ii. How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?

If you agree to participate in a remote interview with me, I will ask your permission to audio record the interview to facilitate the transcriptions and subsequent data analysis. You are encouraged to provide responses that are a true reflection of your own experiences, as all information will be treated with strict confidentiality and anonymity.

All information from the questionnaires will be filed under a number and not your name. All information from the interviews will be filed under a pseudonym and not your name. All information will be kept on password protected computer with restricted access to the researcher and her supervisor. You are encouraged to provide an honest response to the questions, as all information provided will be treated with entire confidentiality and anonymity. In the completion of the study, and following verification for accuracy of the transcriptions, all research written and audio records, will be destroyed within five years of completion of this study.

There are no known risks associated with participating in this research. Although there is no compensation for your participation in this study, we do hope that the study will lead to a variety of publications in peer reviewed journals as well as conference/seminar presentations for the future benefit of female academic professionals.

Your participation in this research project is voluntary and greatly appreciated. Please take your time in deciding whether you wish to participate in this project. In the event of

participant's withdrawing from the study, participants will not incur any form of penalties or form of liability nor the relationship you have, if any, with the researcher will be affected. The potential consequences that may occur, is that this would impact on the completion of my PhD programme.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (**approval number HSSREC/00000022/2019**).

You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. In the event of any concerns/questions you may contact the researcher, the researcher's supervisor, and/or the UKZN Humanities & Social Sciences Research Ethics Committee if you have questions about your rights as a study participant. The contact details are as follows:

Study's Researcher: Ms Nuria Cadete  
Mobile phone: 079 901 9919  
Email: 211560754@stu.ukzn.ac.za or nuriacadete@hotmail.com

Researcher's Supervisor: Professor Shaun Ruggunan  
Office number: 031 260 7563  
Email: Ruggunans@ukzn.ac.za

### **Humanities & Social Sciences Research Ethics Administration**

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, South Africa

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

If you decide to take part in this study, please continue to read and sign the attached consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. The participant needs to inform the researcher formally so that their information will not be used when concluding the findings or data collection methods for record purposes. There will be no costs incurred by participants as a result of participation in the study. There are no incentives or reimbursements for participation in the study.

May I thank you for your time in anticipation of your participation in this study.

## **Participant Informed Consent Form**

I, \_\_\_\_\_ have been informed about the study entitled: **Exploring Workplace Environmental Factors Affecting Female Academics' Psychological Resilience: A Mixed Methods Sequential Explanatory Study**

I understand the purpose and procedures of the study as listed above.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I understand that my participation in this study is entirely voluntary and that I may withdraw at any time without any disadvantage.

I have been informed that there are no risks associated with participating in this study, and that my confidentiality and anonymity will be respected and maintained at all times.

I understand that I may be invited to participate in phase-two of this study. I consent to the interview be audiotaped and subsequently transcribed to facilitate data analysis.

I understand that I may not directly benefit from taking part in this study, and that the information I provide will be used within confidentiality and anonymity, as a PhD thesis and research publications.

If I may have any further questions/concerns in relation to the study, I understand that I may contact the study's researcher, the researcher's supervisor, and/or the UKZN Humanities & Social Sciences Research Ethics Committee following contact details below:

Study's Researcher: Ms Nuria Cadete  
Mobile phone: 079 901 9919  
Email: 211560754@stu.ukzn.ac.za / nuriacadete@hotmail.com

Researcher's Supervisor: Professor Shaun Ruggunan  
Office number: 031 260 7563  
Email: Ruggunans@ukzn.ac.za

**Humanities & Social Sciences Research Ethics Administration**

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Private Bag X 54001

Durban

4000

KwaZulu-Natal, South Africa

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to participate in the current study	Yes		No	
--	-----	--	----	--

I hereby provide consent to Audio-record my interview	Yes		No	
---	-----	--	----	--

\_\_\_\_\_  
**Signature of Participant**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Witness**  
**(Where applicable)**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Translator**  
**(Where applicable)**

\_\_\_\_\_  
**Date**

## APPENDIX C

### ONLINE SURVEY PARTICIPATION INVITATION [UKZN NOTICE SYSTEM & ONLINE SURVEY INTRODUCTION]

#### UKZN Notice System Introduction Text

#### Research Survey: Workplace Environmental Factors Affecting Female Academics' Psychological Resilience

Dear Prospective Participant

My name is Núria Cadete. I am currently enrolled in the Ph.D. programme at UKZN, School of Management, IT and Governance, Westville Campus - under the supervision of Professor Shaun Ruggunan. We would like to invite you to participate in a research study entitled:

#### Exploring Workplace Environmental Factors Affecting Female Academics' Psychological Resilience: A Mixed Methods Sequential Explanatory Study

The research survey is intended for **all women academic staff** from UKZN's four colleges at the five campuses, irrespective of academic rank. **The survey is brief and it should not take more than 15 minutes to complete.** We kindly ask that you answer **all** questions in the survey.

The purpose of this study is to explore and describe women academics' own perceptions of resilience at the UKZN workplace environment. More specifically this study seeks to understand the relationship between the research variables, these being psychological resilience, negative mental health outcomes (NMHO), building blocks or determinants of psychological resilience and workplace environmental factors (WEFs).

Your participation in this study is absolutely critical to helping us understand how WEFs may be affecting your experiences of resilience at UKZN. In conducting this study, therefore, it is envisioned that the results obtained will go a long way in providing new knowledge in the field of Human Resources Management. An important goal of this study is to inform effective

resilience-based interventions to prevent and/or mitigate the adversities faced by women academics not just at UKZN but across universities in South Africa.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSSREC/00000022/2019). Your participation in this study is completely voluntary, and you can withdraw from the survey at any point. There are no foreseeable risks associated with this project, and there are no incentives or reimbursements for participation in the study. Your responses will be kept strictly confidential and anonymous, and data from this research will be reported only in the aggregate. To protect your anonymity, the survey data will be coded, kept securely in a password-protected computer with restricted access to the researcher, and destroyed within five years of completion of this study. Please view research-related documents (i.e., gatekeeper's approval, and ethical approval) attached to this notice. Should you have any questions at any time about this study, please contact either myself (the researcher) or my supervisor at the contact details specified below.

Please click on the survey link below (or copy and paste the survey URL link into your Internet's browser) to access the electronic survey and begin the survey. This will indicate your consent to participate in this study.

Survey Link: <https://www.questionpro.com/t/AQDCIZgVce>

We thank you for your willingness to participate in this survey.

Sincerely yours,

Researcher: Ms Nuria Cadete | Mobile phone: 079 901 9919 | Email: 211560754@stu.ukzn.ac.za or nuriacadete@hotmail.com

Supervisor: Professor Shaun Ruggunan | Office number: 031 260 7563 | Email: ruggunans@ukzn.ac.za

## Online Survey Page Introduction Text

Dear Participant

Please accept our thanks for giving your time and consenting to participate in this research.

The research survey is intended for **all women academic staff** from UKZN's four colleges at the five campuses, irrespective of academic rank. **The survey is brief and it should not take more than 15 minutes to complete.**

We would be grateful if you would only complete the survey **once** so that the end results of this research will not be skewed. We also kindly ask that you answer **all** questions in the survey.

Please click on the **NEXT** box below to complete the survey.

Sincerely yours,

Researcher: Ms Nuria Cadete | Mobile phone: 079 901 9919 | Email:  
211560754@stu.ukzn.ac.za or nuriacadete@hotmail.com

Supervisor: Professor Shaun Ruggunan | Office number: 031 260 7563 | Email:  
ruggunans@ukzn.ac.za

**APPENDIX D**  
**PHASE-ONE QUESTIONNAIRE INSTRUMENT**



**Exploring Workplace Environmental Factors Affecting Female Academics’  
Psychological Resilience: A Mixed Methods Sequential Explanatory Study**

\_\_\_\_\_ **Full-Scale Study** \_\_\_\_\_

**By**

**Ms. Núria Cadete**

School of Management, IT and Governance, University of KwaZulu-Natal, Durban,  
KwaZulu-Natal, South Africa

## QUESTIONNAIRE

### SECTION A: DEMOGRAPHIC DATA

This starting point section aims to establish contextual information about you as being a woman academic professional and is used exclusively for statistical purposes. The demographic information is a fundamental part of the process of understanding the composition of women academics at the University of KwaZulu-Natal [UKZN], in terms of the psychological resilience experiences at UKZN.

**Instructions: Please answer each question as accurately as possible by ticking or circling the appropriate answer block:**

**1. Age [please indicate your age range]**

18-24	25-29	30-34	35-39	40-44	45-49	50+
1	2	3	4	5	6	7

**2. Race [please indicate your race]**

Black	White	Indian	Coloured	Other	Prefer not to say
1	2	3	4	5	6

**3. What is your relationship status?**

Single	Married / Partnered	Divorced / Separated	Widowed	Prefer not to say
1	2	3	4	5

**4. How many children do you have?**

0	1	2	3	4	Prefer not to say
1	2	3	4	5	6

**5. Where were you born? [Please answer Only 5.1 or 5.2]**

**5.1. In South Africa – Please select your home province.**

PROVINCE	Item
Western Cape	1
Eastern Cape	2
Northern Cape	3
Free State	4
Gauteng	5
KwaZulu-Natal	6
Limpopo	7
Mpumalanga	8
North West	9

**5.2. Outside South Africa – Please specify your home country.**

\_\_\_\_\_.

**6. What is your highest academic qualification completed?**

Bachelor's Degree	Honours Degree	Master's Degree	Doctoral Degree	If other, please specify: _____
1	2	3	4	5

**7. How long have you been an academic in general?**

<2 years	2-4 years	5-9 years	10-14 years	15-19 years	20 > years
1	2	3	4	5	5

**8. How long have you been an academic at UKZN?**

< 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20 > years
1	2	3	4	5	5

**9. What is your current appointment designation at UKZN?**

Lecturer	Senior Lecturer	Associate Professor	Full Professor	If other, please specify: _____
1	2	3	4	5

**10. What is your type of contract of employment at UKZN?**

Temporary contract [Less than six months]	Fixed-term contract [At least six months]	Permanent contract [No end date]
1	2	3

**11. Which of UKZN's Colleges are you employed in?**

Humanities	Agriculture, Engineering and Science	Health Sciences	Law and Management Studies
1	2	3	4

**12. What is your home UKZN Campus?**

Edgewood	Howard College	Medical School	Pietermaritzburg	Westville
1	2	3	4	5

## SECTION B: THE CONNOR-DAVIDSON RESILIENCE SCALE [CD-RISC]

**Psychological Resilience [or Resilience]** is “the capacity people have to adapt swiftly and successfully to stressful/traumatic events while not reverting to the original state” (Shrivastava & Desousa, 2016: 38).

**Instructions:** Listed below are a series of statements that you may use to describe your perceptions of resilience experiences within the context of UKZN’s workplace environment. Please respond to each statement honestly by indicating how truthfully each statement describes you now, not as you wish to be in the future. Please answer every statement, even if you are not completely sure about the answer. **Please tick or circle appropriately on the following scale of 1 to 5:**

Not true at all	Rarely true	Sometimes true	Often true	True nearly all of the time
1	2	3	4	5

S/N	Measurable Items					
1.	I am able to adapt to changes occurring at UKZN	1	2	3	4	5
2.	I have close and secure collegial relationships that offer emotional support at UKZN	1	2	3	4	5
3.	I believe that sometimes fate or God can help in overcoming stressful events at UKZN	1	2	3	4	5
4.	I can deal with whatever comes my way at UKZN	1	2	3	4	5
5.	Past successes give me confidence to deal with new challenges at UKZN	1	2	3	4	5
6.	I see the humorous side of things when I am faced with stressful events at UKZN	1	2	3	4	5
7.	Having to cope with stressful events at UKZN can make me stronger	1	2	3	4	5
8.	I tend to bounce back after illness, injury, or other hardships at UKZN	1	2	3	4	5

9.	Positive or negative experiences, I believe that things happen for a reason	1	2	3	4	5
10.	At UKZN I give my best effort no matter what the outcome may be	1	2	3	4	5
11.	I believe I can achieve my goals at UKZN	1	2	3	4	5
12.	When things look hopeless with my work-life at UKZN, I don't give up	1	2	3	4	5
13.	I know where to turn for help during stressful times at UKZN	1	2	3	4	5
14.	I stay focused and think clearly when under pressure at UKZN	1	2	3	4	5
15.	I prefer to take the lead in problem solving at UKZN	1	2	3	4	5
16.	I am not easily discouraged by failure at UKZN	1	2	3	4	5
17.	I think of myself as a strong person when dealing with stressful events at UKZN	1	2	3	4	5
18.	I can make unpopular or difficult decisions that affect other people, if it is necessary at UKZN	1	2	3	4	5
19.	I can handle unpleasant or painful feelings such as sadness, fear and anger at UKZN	1	2	3	4	5
20.	In dealing with adversities at UKZN, sometimes I have to act on a hunch without knowing why	1	2	3	4	5
21.	I have a strong sense of purpose of work at UKZN	1	2	3	4	5
22.	I feel in control of my work-life at UKZN	1	2	3	4	5
23.	I like challenges at UKZN	1	2	3	4	5
24.	I work to attain my goals no matter what stressful events occur at UKZN	1	2	3	4	5
25.	I take pride in my achievements at UKZN	1	2	3	4	5

**SECTION C: WORKPLACE ENVIRONMENTAL FACTORS [WEFS] IN HIGHER EDUCATION INSTITUTIONS [HEIS]**

Scientific research supports the theoretical stance that various WEFs within HEIs may affect the psychological well-being of academic staff in that university setting, resulting in **Negative Mental Health Outcomes [NMHOs]** such as stress, depression, anxiety, burnout, and compassion fatigue (Rees et al., 2015:5).

**Instructions:** Listed below are various factors that may contribute to your experiences of NMHOs at UKZN. Please respond to each item by indicating the extent to which each WEF may contribute to your experiences of NMHOs at UKZN. **Please tick or circle appropriately on the following scale of 1 to 5:**

To little or no extent	To a limited extent	To some extent	To a considerable extent	To a great extent
1	2	3	4	5

S/N	Measurable Items					
26.	Teaching demands	1	2	3	4	5
27.	Research demands	1	2	3	4	5
28.	Administrative demands & skewed workloads	1	2	3	4	5
29.	Knowledge, skill, and ability [KSAs]	1	2	3	4	5
30.	Professional & personal networking	1	2	3	4	5
31.	Coaching support	1	2	3	4	5

32.	Mentoring support	1	2	3	4	5

33.	Compensation & rewards	1	2	3	4	5
-----	------------------------	---	---	---	---	---

34.	If a particular factor at UKZN that you may identify with has not been listed above, please name the factor on the space below and rate your experience of that factor with regards to NMHOs experiences [using the scale of 1 to 5]:					
		1	2	3	4	5
		1	2	3	4	5

## SECTION D: THE MODEL OF INDIVIDUAL WORKFORCE RESILIENCE

This section consists of sub-sections D1 and D2 and focuses on measuring key concepts highlighted in the Model of Individual Workforce Resilience developed by Rees et al. (2015: 4).

### SUB-SECTION D1: Negative Mental Health Outcomes [NMHOs].

**Instructions:** Listed below are five [defined] NMHOs that you may experience at UKZN. Please respond to each item by indicating the extent to which you have felt each outcome this year [2020] at UKZN. **Please tick or circle appropriately on the following scale of 1 to 5:**

To little or no extent	To a limited extent	To some extent	To a considerable extent	To a great extent
1	2	3	4	5

S/N	Measurable Items					
35.	<b>Stress:</b> is a state of anxiety produced when events and responsibilities exceed one's coping abilities (Lazarus & Folkman, 1984).					
	Stress	1	2	3	4	5
36.	<b>Burnout:</b> is "a state of complete emotional, physical and mental exhaustion" (Lunt, 2017: 102).					
	Burnout	1	2	3	4	5
37.	<b>Depression:</b> is a common psychological illness, characterised by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities (WHO, 2019).					
	Depression	1	2	3	4	5
38.	<b>Anxiety:</b> is a negative mood state that is accompanied by bodily symptoms such as increased heart rate, muscle tension, a sense of unease, and apprehension about the future (APA, 2013; Barlow, 2002).					

	Anxiety	1	2	3	4	5
39.	<b>Compassion Fatigue:</b> is “occupational burnout that has been found to be particularly associated with caregiver stress and thought to occur as a result of providing ongoing empathy and compassion to others but neglect of one’s own self-care” (Rees et al., 2015: 2).					
	Compassion fatigue	1	2	3	4	5
40.	If a particular NMHO that you may identify with has not been listed above, please name the outcome on the space below and rate your experience of that outcome at UKZN [using the scale of 1 to 5]:					
		1	2	3	4	5
		1	2	3	4	5

**SUB-SECTION D2: Building Blocks [Determinants] of Psychological Resilience [BBPRs]**

**Instructions:** Listed below are four defined determinants of psychological resilience that you may experience within UKZN. Please respond to each item by indicating the extent to which you think you have experienced these BBPRs this year [2020] at UKZN. **Please tick or circle appropriately on the following scale of 1 to 5:**

To little or no extent	To a limited extent	To some extent	To a considerable extent	To a great extent
1	2	3	4	5

S/N	Measurable Items					
41.	<b>Neuroticism:</b> is a “tendency to experience enduring negative emotional states such as anxiety, guilt, anger and depression more frequently, intensely, and readily, and for a more enduring period of time” (Rees et al., 2015:3).					
	Neuroticism	1	2	3	4	5
42.	<b>Mindfulness:</b> is the “ability to attend to intentionally and maintain non-judgmental awareness of one’s experience [thoughts, feelings, physical sensations] in the present moment” (Reich et al., 2010:472).					
	Mindfulness	1	2	3	4	5
43.	<b>Self-efficacy:</b> is an individual's belief in his/her own ability to perform a selected task (Bandura, 1977).					
	Self-efficacy	1	2	3	4	5
44.	<b>Coping:</b> is “a process of adjustment following an adverse event” (Rees et al., 2015: 4).					
	Coping	1	2	3	4	5

45.	If a particular building block [or factor] of resilience that you may identify with has not been listed above, please name the factor on the space below and rate your experience of that factor at UKZN [using the scale of 1 to 5]:					
		1	2	3	4	5
		1	2	3	4	5

**You have reached the end of the questionnaire!**

Please fill in the form below if you may be willing to participate in a brief interview for clarification of data collected. Your information will be kept confidential. In the light of the current pandemic face to face interviews will not be conducted but I will contact you through your preferred means of communication to set up a remote interview.

First Name	Last Name	Preferred Contact Method

**Thank you very much for participating in this study!**

**APPENDIX E**  
**SUPPORT LETTER OF CHANGE IN QUALITATIVE INTERVIEW METHOD IN**  
**PHASE-TWO [DUE TO COVID-19]**



Dear Participant

I hope that you are safe and well.

I would like to express my appreciation for your support and all your inputs in the phase-one [on-line questionnaire] of this research study, entitled:

Exploring Workplace Environmental Factors Affecting Female Academics' Psychological Resilience: A Mixed Methods Sequential Explanatory Study

As we proceed into this next phase-two, a small change in the qualitative data gathering method is required in an effort to adapt to the current COVID-19 pandemic regulations that are being enforced at the present time. Here are the proposed Phase-Two updates:

1. To adapt to coronavirus-related conditions of social distancing, I will be holding one-on-one interviews remotely, instead of holding face-to-face interviews as was originally planned.
2. Where possible Skype or Zoom will be the preferred interview methods to use as these methods may help to virtually replicate the face-to-face process, and allow the human connection between the researcher and the participant to be experienced through the visual. These methods also help the researcher assess the reactions of participants during interviewing and feedback processes. However, the remote interviews may be

conducted using one interview method of preference to participants, which may include: online platform interviews (Skype or Zoom), telephone interviews, or e-mail interviews/open-ended surveys.

Prior to the remote interview, the informed consent document will be emailed to participants who have volunteered for the interview in Phase-One. Prior to beginning the interviews, I will request the participant to confirm verbally that the participant consents to be interviewed and has signed and dated the consent form.

To ensure that privacy and the confidentiality of the research participants' and research data is safeguarded, all data recordings will be kept in a password-protected computer, in a location that is managed and has access controls in place.

Thank you again for your promptness and commitment to participate in this important research study here at the University of KwaZulu-Natal.

Ms Nuria Cadete

Mobile phone: 079 901 9919

Email: 211560754@stu.ukzn.ac.za or nuriacadete@hotmail.com

**APPENDIX F**  
**PHASE-TWO IN-DEPTH INTERVIEW TOPIC GUIDE**



**Exploring Workplace Environmental Factors Affecting Female Academics’  
Psychological Resilience: A Mixed Methods Sequential Explanatory Study**

By

**Ms. Núria Cadete**

School of Management, IT and Governance, University of KwaZulu-Natal, Durban,  
KwaZulu-Natal, South Africa

## **In-Depth Interview Questions Guide**

### **Preamble**

Thank you for volunteering your time and agreeing to participate in this interview. I will conduct the interview with you on the topic: **Exploring Workplace Environmental Factors Affecting Female Academics Psychological Resilience: A Mixed Methods Sequential Explanatory Study**. This interview is an important part of the study and completion of my PhD programme, for which I truly appreciate your time and I hope our interview will worth your while.

The aim and purpose of this interview is to add depth and richness upon, the quantitative results obtained in phase-one. I will be asking you questions regarding the extent to which academic workplace environmental factors at UKZN may potentially affect your psychological resilience; your perceptions as to how your work-life resilience may be affected by potential workplace environmental factors at the UKZN work environment; and how the Human Resources Management at UKZN could best help address the concerns around psychological resilience in the context of female academics. It is anticipated that the interview will take approximately 30–45 minutes.

I need to remind you that your participation in this study is VOLUNTARY and that your ANONYMITY will be strictly maintained by me, at all times, and your responses will not be used for any purposes outside of this study. I also need to remind you that there is no monetary gain from participating in this study, nor there are any known risks associated with participating in this study.

Finally, all the data that I collect from you in the interview will be treated in a confidential manner, so all information that identifies you from the transcripts will be removed, and replaced with a pseudonym.

I first would like to know the following:

- Please confirm what your position as an academic is, and briefly describe the activities that you are involved at the workplace?
- How long have you performed that role?
- How would you describe your workplace environment?
- Describe how your workplace environment, can demand resilience from you?

How do female academics explain their perceptions or lived experiences of general perceived levels of psychological resilience, workplace environmental factors, negative mental health outcomes, and building blocks of psychological resilience?

- Please describe which of these workplace environmental factors are more likely to affect your wellbeing negatively?
- To what extent does workplace environmental factors affect upon your psychological resilience? (Please elaborate with vivid examples).
- Do you think of any other factor, not listed here, which is potentially adversely affecting your wellbeing at work? Can you tell me more about that?
- According to the results obtained in phase-one, female academics are low in the dimensions of mindfulness, self-efficacy, and coping, and high in the dimension of neuroticism. In your point of view, what do you think, if anything, might be affecting female academics' resilience negatively?
- According to the results obtained in phase-one, female academics are higher in the dimensions of mindfulness, self-efficacy, and coping, and low in the dimension of neuroticism. In your point of view, what do you think, if anything, might be affecting female academics' resilience positively?
- What other important dimension(s) of resilience, different from dimensions proposed in phase-one, do you think is/are relevant and reflect your experience of resilience at the academic workplace environment? Specific examples?
- According to the results obtained in phase-one, female academics are/are not predisposed to high levels of adverse outcomes such as burnout, depression, anxiety,

stress, compassion fatigue. What do you think may be the explanation for this outcome in your point of view?

- What other important potential adverse outcome(s), different from the adverse outcome(s) proposed in phase-one, do you think you may be inclined to experience in your academic workplace environment? Specific examples?

How do female academics feel about the role of South African higher education institutions management and human resources management in supporting/promoting their psychological resilience and preventing/managing workplace environmental factors-related negative mental health outcome experiences?

- Please tell me about what drives you the most and the least at work? What in your opinion are some of the strong and weak points of being a female academic?
- Based on your experiences, how, if at all, has the Human Resources Management impacted on the resilience of female academics?
- In your view, how best could Human Resources Management respond to the psychological resilience needs of academic females? Specific examples?

Thank you very much for your time and input today. The information you have provided me with will help me complete my thesis, and hopefully lead to a variety of publications in peer reviewed journals as well as conference/seminar presentations for the future benefit of female academic professionals. I also hope that this study will help in the design of effective Human Resources Management interventions that promote resilience of female academics. I will be in touch to give you the interview transcripts and what I think are the main themes, so that you may also have a chance to change, if you wish, any information provided.

Are there any last comments that you would like to make?

**Thank you again for taking part in this study!**

**APPENDIX G**  
**TOTAL WORD AND PAGE COUNT OF PHASE-TWO**

**[27 INTERVIEWS]**

<b>Interviews</b>	<b>Recording Minutes</b>	<b>Pages</b>	<b>Words</b>
1	88.25	27	9 249
2	110.11	40	15 482
3	75.57	26	10 411
4	120.40	38	12 821
5	73.10	27	8 841
6	85.59	32	12 711
7	137.28	46	17 819
8	74.18	27	10 795
9	129.47	40	15 534
10	124.06	49	19 177
11	115.55	39	15 226
12	59.12	21	7 777
13	77.44	25	9 021
14	63.17	22	7 529
15	92.02	32	11 720
16	103.05	30	11 466
17	98.02	28	10 270
18	112.44	29	10 827
19	125.22	47	19 045
20	166.84	57	22 782
21	94.58	32	13 597
22	92.46	30	12 228

23	135.19	59	24 860
24	80.23	26	10 187
25	74.50	24	8 704
26	55.41	19	6 764
27	112.47	35	13 995
<b>Total</b>	2 495 minutes [42 hours]	907 pages	348 838 words

**APPENDIX H**  
**KEY KNOWLEDGE, SKILL, AND ABILITY [KSAs] IN ACADEMIC**  
**WORKPLACES**

Domain of Knowledge	Domain of Skill	Domain of Ability
<ul style="list-style-type: none"> <li>• Online teaching and learning</li> <li>• Learning management systems</li> <li>• e-Learning development</li> <li>• Customer service</li> <li>• Adult learning theory</li> <li>• Face-to-face teaching and learning</li> <li>• College/university administration</li> <li>• Organisational development</li> <li>• Virtual environments</li> <li>• Classroom-based technology integration techniques</li> <li>• Laws, policies, and procedures in training programmes</li> <li>• Data management software</li> <li>• Professional development</li> <li>• Human resources management</li> <li>• Virtual classrooms</li> <li>• Content management systems</li> <li>• Social media technologies</li> <li>• Statistical analysis tools</li> <li>• Accessing and analysing data</li> <li>• Motivation theories</li> <li>• Cognitive learning theory</li> <li>• SWOT analysis</li> <li>• STEM</li> <li>• Business intelligence</li> <li>• Theories of leadership</li> <li>• Mindfulness awareness</li> <li>• Self-knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Oral and written communication skills</li> <li>• Collaboration skills</li> <li>• Interpersonal communication skills</li> <li>• Customer service skills</li> <li>• Organisational skills</li> <li>• Leadership skills</li> <li>• Content development skills</li> <li>• Project management skills</li> <li>• Tactical and strategic planning skills</li> <li>• Business analysis skills</li> <li>• Research skills</li> <li>• Time management skills</li> <li>• Team building skills</li> <li>• Creative problem-solving skills</li> <li>• Finance/budgeting skills</li> <li>• Coaching skills</li> <li>• Computer software skills</li> <li>• Logical problem-solving skills</li> <li>• Creative problem-solving skills</li> <li>• Mentoring skills</li> <li>• Relationship building skills</li> <li>• Talent management skills</li> <li>• Self-management skills</li> <li>• Statistical analysis skills</li> <li>• Negotiation skills</li> <li>• Coping skills</li> <li>• Conflict-management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative different team members</li> <li>• Work well with others</li> <li>• Deliver training to learners</li> <li>• Develop course materials</li> <li>• Work under deadlines</li> <li>• Prioritise tasks</li> <li>• Manage multiple projects</li> <li>• Demonstrate policies, procedures, and new information</li> <li>• Adapt and acquire new things quickly</li> <li>• Manage multiple tasks</li> <li>• Share constructive feedback</li> <li>• Think strategically</li> <li>• Develop assessments</li> <li>• Learn quickly and independently</li> <li>• Work independently</li> <li>• Evaluate complex issues</li> <li>• Teach in virtual learning environments</li> <li>• Teach face-to-face</li> <li>• Integrate theory and research into practice</li> <li>• Communicate complex material</li> <li>• Recognize opportunities and takes action</li> <li>• Accommodate different learning styles</li> <li>• Self-efficacy</li> </ul>

Source: Adapted from Kang and Ritzhaupt (2015: 251–256)

## APPENDIX I

### COACHING AND MENTORING DIFFERENCES

Domain	Coaching	Mentoring
Level of Formality	Usually guided by some type of formal agreement between the coach and coachee relationship	Tends to be more informal, more likely to happen organically as and when the mentee needs advice, guidance, and support.
Timeframe	Offered over a set time period	Can be more long-term and developmental in nature.
Orientation	More concerned with the improvement of current on-the-job performance	Less concerned with current performance and more focused on future career development and aspirations
Focus	Dual focused – on the individual coachee and on specific development areas/issues and the wider organisation or service	More focused on the broader development of the individual mentee.
Experience required of coaches/mentors	Unless the focus of a coaching intervention is specific skill development, the coach does not necessarily have to come from the same practice area as the coachee. Coaches usually have a skillset which is transferable across various sectors and areas of practice.	Generally, the mentor should be in the same field as the mentee and have practice or sector specific knowledge relevant to the mentee.
Seniority	Coaches do not necessarily have to be in more senior position than the mentee, with having the requisite skills for coaching seen as more important.	In the practice arena, mentors are typically more senior than the mentee so they can pass on knowledge, experience, and opportunities.

Source: Morgan & Rochford (2017: 10)

## APPENDIX J

### RELATIONSHIPS BETWEEN PARTICIPANTS' DEMOGRAPHIC DATA AND THE STUDY'S MAIN VARIABLES/CONCEPTS

R/Q	Question 1. What is the general perceived level of psychological resilience among female academics in the context of their workplace environment?	Question 2. What workplace environmental factors [WEFs] do female academics identify as highest contributors of their experiences of negative mental health outcomes [NMHOs]?	Question 3. To what extent do female academics experience NMHOs such as stress, depression, anxiety, burnout, and compassion fatigue due to WEFs?	Question 4. To what extent do female academics experience building blocks of psychological resilience [BBPRs] such as neuroticism, mindfulness, self-efficacy and coping in the context of their workplace environment?
Q/S	Section B: Connor-Davidson Resilience Scale	Section C: Workplace environmental factors	Section D1: Negative mental health outcomes	Section D2: Building blocks of psychological resilience
Participant + Demographics	Age Race Relationship status Number of children Proviseo Highest Qualification How long academic in general How long academic at UKZN Current Designation Contract Type College Campus	Age Race Relationship status Number of children Proviseo Highest Qualification How long academic in general How long academic at UKZN Current Designation Contract Type College Campus	Age Race Relationship status Number of children Proviseo Highest Qualification How long academic in general How long academic at UKZN Current Designation Contract Type College Campus	Age Race Relationship status Number of children Proviseo Highest Qualification How long academic in general How long academic at UKZN Current Designation Contract Type College Campus
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**APPENDIX K**  
**LANGUAGE EDITING CERTIFICATE**

We the undersigned, do solemnly declare that we have abided by the University of KwaZulu-Natal's policy on language editing. The thesis was professionally edited for proper English language, grammar, punctuation, spelling, and overall academic style. All original electronic forms of the text have been retained should they be required.



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**GARY STUART DAVID LEONARD**  
UKZN Higher Degrees Certified Language Editor  
Commissioner of Oaths V3358  
10 July 2022



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**NÚRIA LEANDRA DE JESUS CADETE**  
Student No. 211560754  
10 July 2022

# APPENDIX L1

## ETHICAL CLEARANCE LETTER



15 July 2019

Ms Nuria Leandra De Jesus Cadete (211560754)  
School of Management, IT & Governance  
Westville Campus

Dear Ms De Jesus Cadete,

**Protocol reference number:** HSSREC/00000022/2019

**Project title:** Exploring workplace environmental factors affecting female academics psychological resilience: A mixed methods sequential explanatory study

### Full Approval – Expedited Application

This letter serves to notify you that your application received on 05 June 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) 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.**

This approval is valid for one year from 15 July 2019.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date.

Yours sincerely,



Dr Rosemary Sibanda (Chair)

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Humanities & Social Sciences Research Ethics Committee  
Dr Rosemary Sibanda (Chair)  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

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## APPENDIX L2

### ETHICAL CLEARANCE RECERTIFICATION/AMENDMENT LETTER



19 January 2021

**Ms Nuria Leandra De Jesus Cadete (211560754)**  
**School of Management, IT & Governance**  
**Westville Campus**

Dear Ms De Jesus Cadete,

**Protocol reference number:** HSSREC/00000022/2019

**Project title:** Exploring workplace environmental factors affecting female academics psychological resilience: A mixed methods sequential explanatory study

#### **Approval Notification – Recertification / Amendment Application**

This letter serves to notify you that your application and request for an amendment and recertification received on 24 November 2020 has now been approved as follows:

- Change in Research Methodology (due to COVID-19)
- Recertification for 1 year (until 19 January 2022)

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.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

Best wishes for the successful completion of your research protocol.

Yours faithfully



.....  
**Professor Dipane Hlalele (Chair)**

/ms

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Humanities & Social Sciences Research Ethics Committee  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
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Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

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