

An exploration of the learners' views on the efficacy of
information communication technology in improving
work performance: The case of KwaZulu-Natal
Department of Health employees registered at a
community learning centre in Durban

By

Charlotte Lungiswa Mafuleka

2024

Pietermaritzburg

Abstract

This study is situated in the context of adult education in KwaZulu-Natal, South Africa, and is framed within the national policies of the *Skills Development Act No. 31 of 2008* and the *Human Resource Development Strategy of South Africa 2010-2030*. These policies underscore the importance of providing continuous skills development and education opportunities for adults in the labour market, particularly emphasizing the need for basic education and training. The research focuses on evaluating the views of adult learners from the Department of Health in KwaZulu-Natal regarding the efficacy of the Information and Communication Technology Adult Basic Education and Training (INCT4) programme at a local Community Learning Centre. It examines how this programme impacts their work performance and personal lives.

The study employs a qualitative research design within an interpretivist paradigm. Data was gathered through semi-structured interviews with employees who had participated in the INCT4 program. This methodological approach was aimed at understanding the learners' perspectives on the skills they acquired and their application in both professional and personal contexts. The findings indicate that learners value the skills gained from the INCT4 programme highly, noting improvements in their work performance and personal life management. These skills enhanced their confidence and self-esteem, enabling them to undertake new tasks and engage more effectively in their professional roles. While the application of these skills varied across different job roles, all learners noted personal benefits, such as increased ability to use digital platforms independently.

The study underscores the significance of adult education as a form of lifelong and life-wide learning. It highlights the role of self-directed learning in adult education, drawing on Knowles's theory of andragogy and Maslow's hierarchy of needs. The research contributes to the understanding of how adult education can facilitate individual and societal development and underscores the need for adult education programmes to be relevant and responsive to learners' needs. The study concludes with a call for further research into the involvement of adult learners in the planning and evaluation of educational programs and the effectiveness of various learning areas in Community Learning Centers (CLCs).

DECLARATION

I, Charlotte Lungiswa Malinga, declare that

1. The research reported in this thesis, except where otherwise indicated, is my original research.
2. This thesis has not been submitted for any degree or examination at any other university.
3. This thesis does not contain other persons' data, pictures, graphs, or other information, unless specifically acknowledged as being sourced from other persons.
4. This thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) Their words have been re-written, but the general information attributed to them has been referenced
 - b) Where their exact words have been used, then their writing has been placed in italics and inside quotation marks and referenced.
5. This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References section.



Student signature

_5th April 2024_____

Date

Dr Anne Harley and Dr Lulama Mbatha

Name of Supervisor/s



Signature



Acknowledgements

I like to express my sincere gratitude and honour to God my strength, for all he has been to me. So many times, I have given up, but he has given me hope and lifted me every time I fell. Throughout my journey he has been a true friend indeed, I was never alone.

I would like to acknowledge my supervisors, Dr Anne Harley and Dr Lulama Mbatha, for their continuous support and guidance. Their wholehearted supervision guided me towards the completion of this study even when the odds were against me. I am deeply touched by your dedication to improving adult education scholarship.

I also want to acknowledge the adult basic education participants for their time and reflections, without which this study would not have been a success.

I dedicate this thesis to my family, especially my daughter, Sithembile, who supported me through and through. I am grateful for your constant reminder and encouragement. I hope you are inspired to achieve even more in your own academic career.

Table of contents

Chapter 1: Introduction	1
1.1 Introduction.....	1
1.2 Background	1
1.3 Focus and purpose of the study.....	3
1.4 Rationale for the study	3
1.5 Research objectives.....	4
1.6 Research questions.....	4
1.7 Research design and methodology.....	5
1.8 Limitations of the study	5
1.9 Structure of the dissertation	5
1.10 Conclusion	6
Chapter 2: Literature review and conceptual framework	7
2.1 Introduction.....	7
2.2 Literature review	7
2.2.1 What is Adult Education?	7
2.2.2 Adult education and training provision in post-apartheid South Africa	12
2.2.3 Adult education and training in the workplace	14
2.2.4 Influence of ICT on the work and personal lives of employees	16
2.3 Conceptual framework.....	18
2.3.1 Humanism	19
2.3.2 Malcom Knowles's andragogy	19
2.3.3 Abraham Maslow's hierarchy of needs.....	22
2.4 Conclusion	25
Chapter 3: Research methodology	26
3.1 Introduction.....	26

3.2 Research paradigm.....	26
3.3 Research approach	26
3.4 Research style	27
3.5 Data generation	28
3.5.1 Sampling	28
3.5.2 Data collection method	29
3.6 Data analysis	30
3.7 Research quality and limitations.....	31
3.8 Ethical considerations	32
3.9 Conclusion	33
Chapter 4: Presentation of the data	34
4.1 Introduction.....	34
4.2 Participants 1 and 2	34
4.3 Participant 3	40
4.4 Participants 4 and 5	42
4.5 Conclusion	45
Chapter 5: Analysis, discussion, and findings	46
5.1 Introduction.....	46
5.2 Inductive analysis.....	46
5.2.1 Reasons to enrol in the INCT classes.....	46
5.2.2 Learners' prior knowledge of computers	48
5.2.3 The use of ICT in the work and personal lives of employees.....	49
5.2.4 Areas of improvement and future learning aspirations	51
5.3 Deductive analysis	53
5.3.1 Knowles's Conception of andragogy.....	53
5.3.2 Maslow's hierarchy of needs	55
5.4 Conclusion	58

Chapter 6: Conclusion.....	59
6.1 Introduction.....	59
6.2 Summary of the findings.....	59
6.3 Reflections on the findings	60
6.4 Reflections on the research process	60
6.5 Possible areas for future research	61
6.6 Conclusion	61
References.....	63
Appendix 1: Informed consent.....	70
Appendix 2: Interview schedule for learners	72

List of abbreviations

ABET –	Adult Basic Education and Training
AET –	Adult Education and Training
CV –	Curriculum vitae
DHET –	Department of Higher Education and Training
FET –	Further Education and Training
HR –	Human Resources
ICT –	Information and communication technology
INCT4 –	Information and Communication Technology learning area at ABET Level 4
IT –	Information technology
NQF –	National Qualifications Framework
SAQA –	South African Qualifications Authority
SARS –	South African Revenue Service
SDA –	Skills Development Act
SETA –	Sector Education and Training Authority
UNESCO –	United Nations Educational, Scientific and Cultural Organization

Chapter 1: Introduction

1.1 Introduction

The need to provide adults with basic education is enshrined in the Constitution of South Africa (South Africa, 1996) as a basic human right. To contribute towards the realization of this right, the *Skills Development Act No. 31 of 2008* (SDA) was implemented. The SDA requires that all employers provide continuous skills development opportunities and create professional prospects for employees to improve their quality of life. This requirement applies as much to the South African government as to any other employer in the country.

In 2009 the South African government reaffirmed through the *Human Resource Development Strategy of South Africa 2010-2030* (2009) that all adults in the labour market should have access to education and training opportunities. This resulted in the province of KwaZulu-Natal committing to ensuring that access to basic education is improved for all adults through the *Provincial Growth and Development Strategy* (KwaZulu-Natal Provincial Government, 2012a). The provincial government also developed the *Provincial Policy Framework on Implementation of Adult Education and Training Programmes in the Workplace* (KwaZulu-Natal Provincial Government, 2012b). The provincial framework aims to ensure that all public service employees are afforded an opportunity to develop their basic skills.

As a response to these national and provincial human resource development directives that promote access to skills development and learning opportunities, the Department of Health in KwaZulu-Natal enrolls those of its employees who do not have a National Qualifications Framework (NQF) Level 1 qualification in state-run community learning centres (CLCs) to promote lifelong learning and improve their access to further training opportunities. This study explores the perceptions of some of the employees, who attended one such course, on its efficacy in relation to their workplace performance and broader lives.

1.2 Background

At the time I embarked on this study, I was involved in the coordination and monitoring of the adult learning programme in the KwaZulu-Natal Department of Health. This programme is based on the *Provincial Policy Framework on Adult Education and Training Programmes in the Workplace* (KwaZulu-Natal Provincial Government, 2012b) objectives, which introduce government employees to a culture of continuous learning by ensuring that all who

do not have the basic NQF Level 1 qualification are given access to learning and skills development opportunities. The NQF levels are determined by the South African Qualifications Authority (SAQA) and used to determine the levels of learning achievements. Level 1 is the lowest NQF level. Adult Basic Education and Training (ABET) is the equivalent to an NQF Level 1 qualification, and for the purposes of ABET, NQF Level 1 has been divided into four ABET levels. The objectives of this policy are to:

Empower provincial government employees to optimally utilise their capabilities in the work environment and advance overall welfare in life and link AET in the workplace with national development programmes aimed at addressing past inequalities and providing access to further education and training (KwaZulu-Natal Provincial Government, 2012b, p. 5)

These are hopeful objectives, but how far they have been realised remains to be seen. There appears to be a gap in understanding how these objectives have been achieved, since little research has been conducted on this.

This study is based on a formal learning programme that is offered at a CLC in Durban. Since 2012, the Department of Health has encouraged its employees to attend the Information and Communication Technology ABET Level 4 (INCT4) programme to improve skills for both personal information and communication technology (ICT) use and delivery of public services through technology. The programme is implemented annually by the Office of the Premier in partnership with the Department of Higher Education and Training (DHET). It starts in February and the final national examinations are written in November. Learners are recruited through the departmental skills development facilitator. The NQF level 1 course seeks to promote continued and professional development. It also aims to promote personal development and well-being. One of its objectives is to improve adult learners' technology skills, contribute to personal development and improve their effectiveness in the workplace. This can only be achieved if the adult learners are supported, and they commit to upskill themselves.

Although learners are encouraged to enrol in the programme, participation is voluntary. The employees have been particularly interested in attending these classes, as they provide them with practical computer skills needed to perform both in their personal lives and in the workplace. A significant amount of time is spent promoting employee participation in

learning programmes, but what adult learners think about the learning they received as part of these programmes needs to be determined.

1.3 Focus and purpose of the study

The focus of this research is the views of employees from the Department of Health in the province of KwaZulu-Natal, of the INCT4 programme and its impact on their work performance and broader personal lives. The employees are adult learners who do not have any formal qualifications and were enrolled into a National Qualifications Framework (NQF) Level 1 INCT4 learning area to acquire basic computer skills.

1.4 Rationale for the study

The amount of effort and time given to the implementation of the government and provincial policies mentioned requires that effort and time is also given to understanding if the programmes implemented are addressing the needs of employees. The study thus aims to understand how the employees perceive the programmes offered. Understanding of the value employees place on the skills would help policy makers to develop programmes that equip employees with skills that improve their ability to perform at work as well as in their personal lives. However, there are broader reasons for studying what adult learners think of the learning programmes offered to them in the public adult education sector.

The role of Adult Education and Training (AET) in a country where there are high illiteracy rates and low levels of education cannot be underestimated. As there is a need to improve the literacy rates and levels of education amongst adults, it is important that CLCs deliver education that is relevant to learners needs. Research has shown that high illiteracy rates and low levels of education often correlate with low productivity, low income, poor health, and poor educational levels in the wider community, all of which stifle national development efforts (Aitchison & Alidou, 2009). Therefore, improved education is likely to result in positive spin-offs, not just for individuals, but also for the country. Education can be seen as a route out of poverty, and good-quality education would allow more rapid economic, social, and cultural development for society (Department of Higher Education and Training (DHET), 2013).

However, according to the *White Paper on Post-School Education and Training* (DHET, 2013), the system of CLCs has not worked effectively, and as a result, a wide range of reform has been introduced. There has been acceptance of the need to assess what has been achieved

in education since 1994 (Chetty, 2015). As a (then) resident and a skills development facilitator in the implementation of adult education in the province of KwaZulu-Natal, I was particularly interested in investigating the effectiveness of learning areas from the point of view of the learners in an adult learning centre in KwaZulu-Natal. There appears to be a gap regarding knowledge about the usefulness of skills gained by adult learners during learning interventions. It is thus important to establish what has been achieved through the lens of the learner. Adult education in South Africa is a generally under-studied area (Aitchison & Alidou, 2009). There is largely a lack of information available on what makes a learning area effective and what we can learn from the way learners view the effectiveness of the learning areas offered at CLCs.

According to Malcom Knowles's (1984) theory of andragogy, adult learners need to learn knowledge that directly influences their job or their personal life. Key to Knowles's focus on learning is the concept of self-direction, which is a process in which "individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (Knowles, 1984, p. 18). If the knowledge gained is relevant, adult learners are more likely to apply these skills in the workplace and their personal lives.

1.5 Research objectives

The study had the following objectives:

- To find out learners' views of the INCT4 course they attended, and what they learned on the course.
- To find out whether the learners had been able to apply the skills they learned on the course in their workplace (the hospital).
- To find out whether learners felt that the skills they learned had improved their effectiveness in the workplace.

1.6 Research questions

The research questions are as follows:

1. What are learners' views regarding the value of skills learnt in INCT4 in their daily lives?

2. To what extent do learners apply skills gained on the INCT4 in their workplaces?
3. How do the INCT4-related skills improve the learners' effectiveness in the workplace?

1.7 Research design and methodology

The study is underpinned by the qualitative research design using the interpretivist paradigm aimed at understanding individual employee experiences. Mack (2010) and Scotland (2012) point out that interpretivist researchers seek to understand human behaviour rather than explain it. To address the key research question, the study used semi-structured interviews with employees who had attended the INCT4 in the previous three to five years (and had thus had significant time to implement the skills learned). I discuss the research design and methodology, and the ethical procedures, in detail in Chapter 3.

1.8 Limitations of the study

The limitations were primarily related to the time and resources to conduct this study. Whilst in the process of conducting the research, I changed employment and transferred to another province and no longer had easy access to the participants. This meant that the time available to spend with participants, to probe further on some of their responses and get more insight into their understanding of the impact of the learning area, was limited.

The research design used was qualitative case study and this posed the limitation of generalisability of the study. Generalisability refers to how the findings of the study can be applied to the whole population. Chetty (2016) cites the inability to verify research results as a limitation of qualitative research because participants have control over the responses provided to open-ended questions. As a result, the findings of this study may not be generalisable to other employees who attended the same learning area in different contexts.

1.9 Structure of the dissertation

The rest of this dissertation is structured as follows:

Chapter 2 provides a review of literature related to the study and a discussion on the chosen theoretical framework. This chapter starts by examining the recent debates about adult education in a broader perspective and narrows it to the South African perspective. In addition, it explores the influence of ICT on the work and personal lives of employees and how this relates to the study. After a discussion of the relevant literature, the chapter presents

the conceptual framework: Knowles's conception of andragogy, and Maslow's hierarchy of needs.

Chapter 3 considers the research design. It commences with a discussion on the research paradigm used in the study. The research style, sampling, data collection methods and data analysis are explained. This chapter also explains the issues of research quality and ethical considerations of the study.

Chapter 4 presents the data generated as part of the research study.

Chapter 5 provides an analysis of the data and discusses this in relation to the literature review and theoretical framework.

Chapter 6 is the final chapter and brings the study to a conclusion by responding to the three key research questions. It includes a reflection on my own learning from the study. Finally, recommendations are made for future research and practice.

1.10 Conclusion

This chapter introduced adult education and training in the context of South Africa and KwaZulu-Natal, outlining the background and rationale for the study. The key research questions were set out and the limitations to the study discussed. The basic methodological design was introduced, and the chapter concluded with the structure of the dissertation. Chapter 2 reviews existing literature on adult education perspectives and the impact of ICT in the lives of adult learners before presenting the theoretical framework used in the study.

Chapter 2: Literature review and conceptual framework

2.1 Introduction

This chapter reviews the literature relevant to the study, outlines recent debates and discourse about adult education in a broader perspective, and presents the conceptual framework provided by Knowles's conception of andragogy and Maslow's hierarchy of needs.

2.2 Literature review

The literature explored in this chapter relates to the study topic, viz. adult learners' perceptions of the INCT course they attended and its application to their personal and working lives. After considering the general concept of adult education, I explore the legislation and policies, applicable globally and in the South African adult education context, which provide the backdrop to this study. I then focus on literature related to the provision of adult education in the workplace, and the relationship between training and employee performance. This is followed by a discussion on research studies about the influence of ICT on the work and personal lives of employees.

2.2.1 What is Adult Education?

Education aims to develop human personality and the sense of dignity and enable all persons to participate effectively in a free society. In South Africa the right to education recognises the importance of adult education as a lifelong process. To fully appreciate how the policy developments related to this study impact the adult learners, a closer look at the concept of adult education and learning is important. Here, I focus on the understanding of adult education as promoted by UNESCO, which has played a critical role in adult education globally. According to UNESCO, adult education encompasses all formal, non-formal, and informal or incidental learning, as well as continuing education, undertaken by adults (UNESCO, 1997). These include both general and vocational learning, and both theoretical and practical learning, and comprise:

all forms of education and learning that aim to ensure that all adults participate in their societies and the world of work. It denotes the entire body of learning processes, formal, non-formal and informal, whereby those regarded as adults by the society in

which they live, develop, and enrich their capabilities for living and working, both in their own interests and those of their communities, organisations, and societies (UNESCO, 2015).

According to UNESCO's recommendations (2015), adults may (re)enter education for several reasons, including to:

- replace missed or neglected primary and/or secondary education.
- develop basic education skills, such as literacy and numeracy.
- develop new vocational skills and expertise to adapt to changing labour market conditions or to change career, or for continued professional development.
- continue learning for personal development and leisure.
- participate fully in social life and in democratic processes.

UNESCO (2019) argues that adult education contributes to economic growth, decent work improvement, gender equality, climate change awareness, and the eradication of poverty. To achieve these benefits in a balanced way, participation in adult education needs to be both greater and more equal.

UNESCO (2019) classifies activities in adult education as belonging to three domains. The first is a minimum level of literacy, basic numeracy, and basic digital skills. The second domain is continuing training and professional skills that include a range of vocational training programmes. The final domain is active citizenship skills which equip adults with the readiness to engage actively with social dimensions. UNESCO (2019) argues that the provision and participation in adult education internationally is still unequally distributed. This is attributed to problematic policy implementation, poor governance, and lack of funding for adult education programmes. Although new policies have been introduced in some countries, the non-recognition of informal and non-formal learning remains a challenge. Governance issues relate to the centralised implementation of programmes that do not consider the needs of adult learners. UNESCO argues that policies implemented in a decentralised manner, close to the learners, may be better suited to consider the learners' needs. To address this unequal distribution, UNESCO "encourages member countries to enhance participation, invest more resources, and develop effective policies that draw on best practices worldwide, particularly in reaching the least advantaged" (2019, p. 84). Moreover, UNESCO (2019) asserts that United Nations member countries need to recognise that adult learning is not always delivered in formal settings and are not necessarily intentional and

structured. Adult learning can also take place in informal and non-formal settings. Acceptance of this should translate to appropriate funding policy, investment in learning technologies, and accreditation of non-formal and informal programmes. If these are not given enough attention, the inequalities that exist will remain. The call for inclusive education will remain an elusive target.

Thus, for UNESCO, adult education needs be seen as lifelong (from basic education to further education), but also life-wide (i.e., it encompasses professional and personal life, but also broader social life). This further supported by Jackson (2012) who argued that the “concept of a lifelong and lifewide concept for learning, education and personal development is the most powerful and appropriate concept because it embraces every aspect of what being and becoming a person means” (p. 24).

Lifelong learning has become a significant topic of policy and academic debate since the end of the last century. As individuals become more responsible for their own decisions about lifestyle and identity, they place more importance on life planning and guidance. Thus, lifelong learning encompasses both general education and vocational education and training. These two sectors are foundations for reading and writing as well as the preparation for work life. However, general education for adults, personal and career development, and any form of learning that takes place in the workplace or in daily activities, are also part of lifelong learning. Kaplan et al. (2017) thus distinguishes between four ‘settings’ (contexts) for lifelong learning: general initial education, vocational education and training, professional development, and personal development. These four learning contexts differ in all countries, but they are all necessary to execute the social and economic objectives of lifelong learning.

Gustavsson (1997) argues that the idea of lifelong learning is rooted in two different traditions: one is concerned with human resource development for the economy, and the other is concerned with promoting democracy and citizenship in the interests of the majority. For example, Knapper and Cropley (2000) argue that lifelong learning is a key instrument in developing a competitive, multi-skilled workforce. Within South Africa, the concept of lifelong learning has evolved since its introduction to outline the importance of a reconstructed education and training system. The system is expected to bring equity and development needs. Upskilling and reskilling of the labour force has been on the government agenda in the sixth administration to professionalise the public service. However, from a general perspective every adult, be it in the public or private service, needs upskilling and

reskilling to better their lives (Department of Higher Education and Training, 2013).

However, Gotta (2019) and UNESCO (2019) argue that besides looking at education as a means for employability, people must recognise the broader value of learning and how it can contribute to equity and social justice in their lives.

In contrast to Gustavsson's (1997) claim that there are two main traditions underlying the concept of lifelong learning, Knapper and Cropley (2000) propose that the nature of lifelong learning should be viewed from three angles: for economic progress and development, for personal development and fulfilment and for social inclusiveness and democratic understanding and activity. Thus, lifelong learning is vital to building a more democratic community and a set of social institutions. Knapper and Cropley (2000) suggest that there is a complex relationship between all three that makes education for a more highly skilled workforce at the same time an education for better democracy and a more rewarding life.

Some conceptualisations of lifelong learning focus on the growing debate between the northern focus on 'global competitiveness' and the southern focus on 'development'. In this respect, lifelong learning is seen as context specific, with different models developed in Europe, Asia, Latin America, and Africa. In the north, the declared focus is seen as being on lifelong education focused on the rapidly changing world, where knowledge and skills need constant updating. The economic competitiveness requires that nations embrace lifelong learning or face stagnation. The argument is based on an assumed link between educational attainment and economic growth. Kaplan et al. (2017), for example, argues that modern society requires individuals and communities to constantly evolve, and for that to happen, lifelong learning is needed throughout society.

In contrast, in 'southern' areas such as Africa, South Asia and Latin America there are arguments for a more holistic view of lifelong learning than the human capital model. The social and cultural values embedded in these societies values collective learning more than individual learning. Whilst all societies have their own specific contexts, African societies for instance have always had a well-established institution of lifelong learning. The African system benefits the collective, community and spiritual over the economic. Lifelong learning in Africa focuses on the achievement of social goals rather than human capital. Therefore, Longworth (2003) argues for an integrated lifelong learning community model which integrates all forms of learning needed in a society and includes adult education. Within the South African context, there still exist challenges to setting up a platform for the country to

promote a learning community. Here, the ‘northern’ perspective, such as Kaplan’s, continues to dominate.

Kaplan et al. (2017) argues that lifelong learning provides six competencies. The first competency has to do with self-management, which is the ability of an individual to make decisions for occupational development, undertake self-evaluation in the learning process, and motivate oneself for occupational development and embrace new learning. Kaplan’s second competency is learning to learn, where learners acquire competency and ability to identify available opportunities for occupational development and to know necessary learning activities. The third competency is on initiative and entrepreneurship. Here, the learners acquire competency and ability to make decisions about any subject, adjust to information change in occupational life, and convert ideas for occupational development into action. The fourth competency is on information acquisition, in which the learners acquire competency and ability to communicate in an effective way in the process of acquiring information and to express ideas about any subject without hesitation (Kaplan, 2016). Kaplan’s fifth competency is digital competencies, and thus directly relevant to this study. Here, the learners gain knowledge of the Fourth Industrial Revolution (4IR) and ability to use a computer for storing information. The final competency is on decision-making, where learners acquire competency and ability to evaluate the achievement of their determined targets and resolve all problems that prevent occupational career development (Kaplan, 2016).

These competencies are necessary in South African adult education, more especially for employed adult learners, who due to demands of the workplace are expected to identify opportunities for self and occupational development, acquire competencies that will enable them to communicate in the workplace, and improve their abilities to achieve organisational targets.

According to Jackson (2012) the term ‘life-wide’ learning was introduced by Reischmann in the 1980’s. This term is defined as learning that involves both intentional and non-intentional learning. This type of learning recognises that adult learning does not only takes place in school but also at work, at home and in social contexts. Reder (2020) and Reischmann (2014) argued that adult learning in contrast to traditional school learning of children is based on many situations and sources merged ‘widely’ into concrete life.

Emerging alongside the ideas about lifelong and life-wide learning, is the concept of the learning society. The learning society exist where education for economic and civic

participation is built into everyday lives of individuals, including emotional and spiritual, at all levels from cradle to the grave. A learning society, therefore, combines excellence with justice and would equip all its citizens with the knowledge, understanding and skills to ensure national economic prosperity.

As can be seen, adult education and learning is an integral part of lifelong and life-wide learning along with the notion of the 'learning society'. The trends and arguments discussed here have found space and manifested themselves in post-apartheid South Africa.

2.2.2 Adult education and training provision in post-apartheid South Africa

As argued by Gustavsson (1997), Aitchison (2003), and Walters (2006) as seen in the discussion above, adult learning is embedded in the political, social, cultural, and economic processes of society. The current South African adult education landscape can be traced back to the 1960s when the night school movement was closed by the apartheid regime. Adult education activists established non-governmental or civic organisations to provide basic education to the masses of the illiterate black population. This alternative mechanism provided the breeding ground for the radical adult education tradition that brought about major political, social, and economic awareness about the injustices of the apartheid regime (Aitchison, 2003). However, with the dismantling of apartheid came the dismantling of much of this alternative adult education movement, but also the growth of state provision and major policy development. In my opinion, in the current South African context, the two primary purposes of adult education should be to enhance possibilities for people to survive their living conditions and to develop skills for involvement in both formal and informal economic sectors, and secondly, to encourage people to participate actively in cultural organisations, social movements, political parties, and trade unions. Therefore, to improve the lives of the poor South African majority, an approach that enables integration across national and local government departments, civil society organisations, and the economy is needed.

Since 1994 several policies have been introduced to ensure that adults who have had no formal schooling, or have an incomplete education, are afforded opportunities to attain some form of qualification. The purpose of these policies has been to transform education and training to be more inclusive of all the learners, including adult learners (Department of Higher Education and Training, 2013). The *South African Qualifications Authority Act, No. 58 of 1995* and its regulations, advocate ease of access to education and training as a mechanism for up-skilling and multi-skilling a workforce. This means that, inter alia, every

registered qualification can be achieved through recognition of prior learning, which allows adult learners to attain some form of qualification. This policy was cognisant that a huge black population had been left out of economic and educational development and, therefore, needed to be accelerated into development so that they could fit into the new economic dispensation.

Heyns (2004) argues that basic education prepares youth and adults for full and active participation in society, and it is a requirement in a truly democratic society. In support of the need for upskilling of the workforce as outlined in the *South African Qualifications Authority (SAQA) Act*, Heyns (2004) further explains that the *Skills Development Act, No. 97 of 1998* provides for an institutional framework for the implementation of the national, sector, and workplace strategies to improve the skills of the South African workforce. Under this act, statutory bodies were instituted with the responsibility of assuring quality education and training in designated sectors. These bodies are known as Sector Education and Training Authorities (SETAs). The SETAs must facilitate the development and implementation of skills development initiatives for the workforce in their sectors.

Furthermore, the DHET introduced the *White Paper for Post-School Education and Training* in 2013, wherein the minister, in its preamble, said that the policy envisages a system made up of a diverse range of educational institutions and types that will expand to cater for the millions of people, especially the youth, but also many adults, who need its benefits. It was envisaged that these programmes would enhance social, family, and employment experiences. While there has been a tendency to focus on formal adult education, there is a growing recognition of non-formal and informal adult learning through community colleges. This is a broader idea of the lifelong and life-wide learning environment.

The White Paper also focuses on increasing the funding through the *Skills Development Levies Act* and National Skills Fund, to improve economic performance, but still retaining the focus on both skills for the workplace/economy and societal development. The insistence of the White Paper on non-formal education can be used to promote social revolution and provide equal opportunities for economic development. According to the World Bank (2018), due to the economic downturn, South Africa has not developed more value-added industries, such as high-tech manufacturing, to capitalise on the skills supplied by the education system. As a result, unemployment has risen to an all-time high in recent times. Since democracy, social assistance and fiscal redistribution have more generally played a fundamental role in

containing the rise in inequality. But the slow growth that generates a mismatch between labour demand and supply makes fiscal redistribution alone grossly insufficient to address the country's inequalities. Research conducted by the National Literacy Trust (2022) indicated that low literacy levels impact the economic potential of a country and its citizens and how it competes in the global community. Solutions to break out of the mutually reinforcing cycle of low growth and high inequality lie in taking bold actions to giving poor South Africans better access to good jobs (World Bank, 2018). However, to attain (and retain) a good job, one needs a set of skills, both new and old.

Benavot et al. (2021) advocate for the concept of “lifelong literacy” which they argue will not only strengthen global approaches to adult literacy but will also inform policy and programme approaches. This integration, they argue, is critical when considering literacy as a socially situated practice.

2.2.3 Adult education and training in the workplace

The training of employees, in general, has been widely accepted as improving performance in the workplace. Bangura (2017), for example, acknowledges the positive impact of training and development on the performance of employees. The relationship between training and development and employee performance is considered as an important contribution towards the quality of employees' knowledge, expertise, and competence. Existing literature (Engel-Hill et al., 2010; Nassazi, 2013; Tharenou et al., 2007; Tshilongamulenzhe et al., 2013; Wright & Geroy, 2001) presents data on the apparent effects of training and development on employee performance. Training is regarded as a foundation for human resources management because it benefits both the organisation and individuals. Employees benefit from training through enhanced and increased quality and ability towards work-related tasks by learning new skills and information, leading to a better understanding of tasks. Training helps employees to boost their morale and increase motivation to perform tasks efficiently. In any training programme, Kirkpatrick and Kirkpatrick (2005) suggest that three key objectives should be included: to gain knowledge, learn new skills and/or increase present skills, or change mindsets.

Wright and Geroy (2001) state that effective training programmes do improve employee competencies. Training, therefore, enhances employee knowledge, skills, and attitude needed for a future job and contributes towards improving the overall performance of the employees to effectively perform their current jobs, thus contributing to superior organisational

performance. Sultana (2012) and Mozael (2015) concur with Wright and Geroy (2001) that training is used to address the lack of employee skills and knowledge to enhance employee performance. For example, Turban and Volonino (2010) asserts that information technology has been identified as one aspect that improves business performance discussed further in the next section. Furthermore, Mozael (2015) has identified that the main challenge for employers in enhancing employee skills and knowledge to improve their performance is the applicability of acquired knowledge, which may differ from what is applied in the workplace. This challenge may be exacerbated by the employee's perceptions about the usefulness of the skills in the workplace. A study by Bezuidenhout et al. (2019) concluded that how adult learners become aware of and assess their level of self-directedness and lifelong learning greatly impacts on how they participate in effective learning and development initiatives in the changing workplace towards the fourth industrial revolution.

However, some studies have shown how workplace training can provide benefits beyond the workplace. According to Amin et al. (2013), training leads to important benefits for individuals and teams, organisations, and society. Their study showed how training (increased knowledge and skills) translates directly into improved performance both in the workplace and at an individual personal level.

According to Indabawa and Mpofu (2006), the empowerment of employees through adult education should embody four elements, namely, access to information, control of one's life, access to finance, and access to decision-making skills. Therefore, adult education in the form of continuing education offered by employers can allow empowerment not only in the sense of developing skills to improve the performance of tasks, greater efficiency, and promotion at work, but go beyond this. Reder (2020) agrees that the workplace itself can become a powerful learning environment informed by the concept of the 'learning organisation', in which employers, workers, educators and trainers engage in new forms of relationships, with important implications for industrial relations, but states that adults also wish to improve their basic skills for other reasons entirely, such as assisting their children with schoolwork, understanding and addressing their own health issues or those of family members, or participating in civic affairs such as voting or understanding political issues. Reder argues that it is thus important to incorporate the idea of life-wide education to measure learning outcomes.

As discussed earlier, this study explores the perceptions of employees from the provincial Department of Health who attended a formal learning programme in computer skills at ABET Level 4/NQF Level 1 that is offered at a CLC in Durban. The programme meets the criteria of formal education as set out by Schugurensky (2000), because it provides structured learning programmes as outlined in the NQF. Although the programme the employees are engaged in is formal and implemented under literacy and basic skills, it clearly also falls within the vocational skills category. It seeks to promote their continuing and professional development, but also to assist them in terms of their personal development and well-being. This study aimed to also explore employee's perceptions about the usefulness of the skills learned on the programme to the workplace, and how learning skills can not only improve performance in the workplace, but also potentially impact on their personal lives.

2.2.4 Influence of ICT on the work and personal lives of employees

As mentioned, UNESCO (2019) identified basic digital skills as part of adult basic education. Nafukho et al. (2005) argue that ICT skills are essential to Africa's development and assert that the best way to promote computers in Africa must be to begin with the individual. They believe that ICT can be used to positively address access issues and open more opportunities for adult learners. The introduction of the notion of the 4IR makes the world for the young and old more challenging and interesting, requiring those without ICT skills to push to attain them through adult education. According to its policy framework, the KwaZulu-Natal Department of Health encourages adult learners to enroll in the INCT4 learning area to empower its employees (KwaZulu-Natal Provincial Government, 2012b). They thus clearly see computer skills as an important aspect of basic adult education for their employees. However, as already noted, employee education can empower employees beyond simply the workplace. According to the World Bank (2018), with the already employed learners, the public service had to shift away from training employees to adapt to the current economic demand towards fostering the capacity of citizens to participate fully in society. Many employees in the department have shifted from valuing education solely for employment towards valuing it as a means of individual and community development. Although a significant amount of time is spent promoting employee participation in learning programmes, it is not clear what adult learners think of the learning they receive. Learners' perceptions of whether learning is important and valuable should be at the centre of these plans by employers.

Information communication technology is defined by Reynolds (2015) as including all tools that capture, store, process, exchange, and use information. Not only do computer skills enable individuals to perform daily tasks, earlier studies cited by de Wet et al. (2016) indicate that the use of ICT has improved the way individuals think, interact, and complete tasks and has also drastically transformed society. To stay abreast of these changes, governments are investing huge amounts of money in improving the way public services are provided. This is also true for the provincial government of KwaZulu-Natal.

Reynolds (2015) distinguishes between personal, group, and enterprise ICT, where personal ICT improves the productivity of individual users in performing stand-alone tasks, either to support decision making or online learning, group ICT improves communications and promotes collaboration among members of a group, and enterprise ICT is used by organisations to define structured interactions amongst their employees. The training of employees to use ICT supports personal productivity so that the group can have improved collaboration, which further increases standardisation and ability to work in the organisation. Bothma (2018) adds that technology boosts employee engagement when used effectively, and he sees technology as an enabler for organisations to improve their productivity.

Several studies have been conducted on ICT, learning and the workplace, many of which suggest that ICT training has benefits beyond simply the workplace. Ziegler and Sussman (1996), for example, conducted a study in the early 1990s that explored how intentional and purposeful learning of skills such as ICT can improve both work and personal life. They argue that ICT has gone through innovations and transformed our society in a way that has totally changed the way people think, work and live. Writing in 1996, they stated that ICT had the potential to prepare students for life in the 21st century.

Twenty years later, in his study on *The Increased use of Information and Communication Technology (ICT) Among Employees: Implications for Work-Life Interaction*, De Wet and Koekemoer (2016) concluded that ICT has a positive impact on employees' work, in terms of increased productivity and efficiency in the workplace and increased availability to employers, clients, and family members, but also on their family life. De Wet and Koekemoer argue that technology is changing rapidly and provides widespread mobility as one of society's everyday functional tools. They report that in South Africa between 2011 and 2014, the number of Internet users grew from 8,5 million to 24,9 million, with 90 per cent of these users access this facility from their mobile devices. Statistics illustrate that South Africans are

moving towards a continuously connected lifestyle, a situation in which ICT seems to have become ubiquitous.

Consistent with this larger view of ICT, UNESCO (2019) sees it as a tool that offers innovative possibilities for achieving lifelong learning and reducing the dependence on traditional formal education structures because it also permits individualised learning. Mobile devices, social media, and online learning can contribute towards achieving adult learning goals. In addition, ICT has substantial capacity for facilitating access to education for people with disabilities, allowing full integration into society, as well as for other disadvantaged groups (2019). Asongu et al. (2023) contend that information technology promotes adult learning and hence, they encourage policy makers to “improve the implementation of measures designed to facilitate universal access to information technologies that are compatible with favourable learning outcomes” (p.12). UNICEF (2022) thus propose the inclusion of innovative ways of using technology in teaching to promote lifelong learning and equity.

However, the negative role of ICT cannot be ignored. In their study, De Wet et al. (2016) discovered that ICT compromised the chain of command in an organisation where employees used it “to allocate tasks more easily to their subordinates without managers’ knowledge” (De Wet et al., 2016, p. 8). In personal lives, employees’ frequency of communication with family members is increased, but the quality of those conversations decreases, as people tend to be distracted by the need to be constantly available to respond to messages and emails.

Having discussed literature relevant to this study, I now turn to the conceptual framework which underpins it.

2.3 Conceptual framework

As mentioned in Chapter 1, Malcom Knowles (1984) argues that adult learners need to learn knowledge that directly influences their job or personal life. Key to Knowles’s focus on learning is the concept of self-direction, which is a process in which “individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Knowles, 1984, p.18). If the knowledge gained is relevant, adult learners are more likely to apply those skills in the workplace and in their personal lives.

In this study, I draw on Malcolm Knowles's concept of andragogy, and Abraham Maslow's hierarchy of needs, to help me understand the learners' perceptions of what they learned. Both theorists are influenced by humanist philosophy.

2.3.1 Humanism

According to humanist education philosophy, the purpose of education is to develop the learners' potential (Elias & Merriam, 2005). The focus is on the self, or learner's needs and interests, and the learner is self-directed and assumes responsibility for their own learning. Humanistic psychology builds on human potential and natural desire for growth and views people as having unlimited potential to improve themselves and seek fulfilment. This is supported by Maslow (1971) and Rogers (1983), both cited in Smith (1999), who assume that people have an intrinsic drive towards growth and self-direction. Smith (1999) argues that the humanistic view of people and their ability to control their own destiny is a powerful tool used by Knowles in his notion of self-actualisation that learners strive to achieve through education. Smith (1999) argues for education that engages with the whole person and with their experiences, and for learning that combines the logical and intuitive, the intellect and feelings. I am of the view that learning should also take into consideration the learner's background and experiences and must make sense for the learners' personal needs in line with Rogers (1983, p. 20) as cited in Smith (1999). Unlike the behaviourist understanding, humanistic psychologists argue that a person's feelings and self-concept connect to an individual's behaviour. Humanists believe that when individuals self-actualise, they reach their full potential. However, self-actualisation is difficult to measure because we must rely upon the individual's own assessment of their experience. Asking learners' perceptions about their learning experience (as in this study) is thus necessary.

2.3.2 Malcom Knowles's andragogy

There is no single theory of learning that can be applied to all adults. Indeed, the literature of the past century has yielded a variety of models, sets of assumptions and principles, theories, and explanations that make up the adult learning knowledge base (TEAL Center, 2011).

However, the theory of andragogy is one of the pioneer adult education theories. It was introduced in 1980 by Malcom Knowles (1913–1997), an American educator. In attempting to document differences between the ways adults and children learn, in the 1980's Knowles popularized the concept of andragogy ("the art and science of helping adults learn"),

contrasting it with pedagogy (“the art and science of teaching children”). Knowles believed that adults learn differently from children and therefore their education should be planned differently. Knowles’s model of andragogy consists of a set of assumptions about the adult learner, which inform the different principles underlying andragogy.

According to Knowles (cited in TEAL Center staff, 2011), adult learners can direct their own learning as they move from dependency to increasing self-directedness. They use their accumulated life experiences to guide their learning. Adult learners are ready to learn as they move through life stages, assuming new social, work or life roles. They are motivated by internal, rather than external, factors and are problem-centred, applying new learning immediately. Based on these assumptions, Knowles first suggested four principles that should be applied to adult learning:

1. **Self-Concept:** Adults need to be involved in the planning and evaluation of their instruction (Knowles, 1984), because they need to be more self-directive than children (Jarvis, 2004).
2. **Adult Learner Experience:** Experience (including mistakes) provides the basis for the learning activities (Knowles, 1984). Mature individuals accumulate an expanding reservoir of experience which becomes an exceedingly rich resource in learning (Jarvis, 2004).
3. **Readiness to Learn:** Adults are most interested in learning subjects that have immediate relevance and impact on their job or personal life (Knowles, 1984). They want to learn in the problem areas with which they are confronted and which they regard as relevant (Jarvis, 2004).
4. **Orientation to Learning:** Adults have a problem-centred orientation (Jarvis, 2004). Adult learning is thus problem-centred rather than content-oriented (Knowles, 1984). Learning is argued as linked to genuine problems and issues in people’s lives (Kearsley, 2010).

In 1984, Knowles added the fifth principle: **Motivation to Learn**. As a person matures, the motivation to learn is increasingly internal (rather than external) (Knowles, 1984).

Key to Knowles’s focus on learning is the concept of self-direction. Knowles claimed that adults as learners know the objectives of what they want to learn before they learn and move from a dependent self-concept to a self-directing one. His assumptions about adult learners,

and principles for adult learning, have profound implications for adult education and adult educators. Knowles (1984) suggested that adult educators:

- Set a cooperative climate for learning in the classroom.
- Assess the learner's specific needs and interests.
- Develop learning objectives based on the learner's needs, interests, and skill levels.
- Design sequential activities to achieve the objectives.
- Work collaboratively with the learner to select methods, materials, and resources for instruction; and
- Evaluate the quality of the learning experience and adjust, as needed, while assessing needs for further learning.

Based on these suggestions, adult education should support the development of self-direction in learners, their readiness to draw on their own experiences where possible and their awareness of the tasks they engage in outside the learning environment and the social roles and stages they associate with (Kearsley, 2010). Kearsley argues that adult educators must understand and respect people's own motivations for learning (2010).

Moreover, because adults need to know why they are learning something, effective teachers explain their reasons for teaching specific skills, rather than just focusing on decontextualised topics and skills (Kearsley, 2010). Because adults learn by doing, effective instruction focuses on tasks that adults can perform, rather than on memorization of content. Because adults are problem-solvers and learn best when the subject is of immediate use, effective instruction involves the learner in solving real-life problems. There is thus mutuality between the learner and educator (Merriam, 2001).

Andragogy has been critiqued for a few reasons. Firstly, educationists such as Merriam (2004) have questioned the validity of the assumption that adults are always internally motivated to learn. Adult learners' need to learn can be influenced by external factors such as the work environment. The work environment can motivate adults to acquire further skills that can promote or develop advanced competencies. Merriam concludes that this assumption does not consider the context in which learning occurs (2004). Secondly, the assumptions as principles have been criticised for being too generalised, looking at the fact that adult learners are different. Critics argue that one must take into consideration that every person has been shaped by his/her culture and society; every person has a history. Brookfield (2003), for example, has criticised the theory as "a culture blind theory", because the concept of self-directed learning and the concept of the student's establishing a non-threatening relationship

with the teacher as a facilitator of learning may neglect races and cultures that value the teacher as the primary source of knowledge and direction. Critics also suggest that social institutions and structures define, to a large extent, the learning transaction irrespective of the individual learner.

Nonetheless, andragogy remains the most learner-centred of all adult educational programming, and many argue that it remains more relevant than ever. Self-directed learning can be linked to adult learning that positions learners toward a more social and political action than individual learning. Through self-directed learning, the adult learner remains self-directed in their learning over long periods of time and periods of change.

2.3.3 Abraham Maslow's hierarchy of needs

If adults are most interested in learning subjects that have immediate relevance and impact on their job or personal life (Knowles, 1984), and want to learn in the problem areas with which they are confronted and which they regard as relevant (Jarvis, 2004), then understanding human needs is important in understanding adult learning. Within the context of exploring adult learners' perceptions of the INCT learning area, I draw from Abraham Maslow's hierarchy of needs theory.

Abraham Maslow was an American psychologist influenced by humanism, as Knowles was. Maslow developed his conception of a hierarchy of needs in 1943. His work laid the foundation for understanding human motivation and understanding and has been used in various fields including adult education. Maslow suggested several independent sets of basic human needs, as depicted in Figure 1 below. Maslow, as cited by Shi and Lin (2020), established the concept of dominance. The concept of dominance means that there is always one need that dominates the other needs, and they follow an order ranging from low to high.

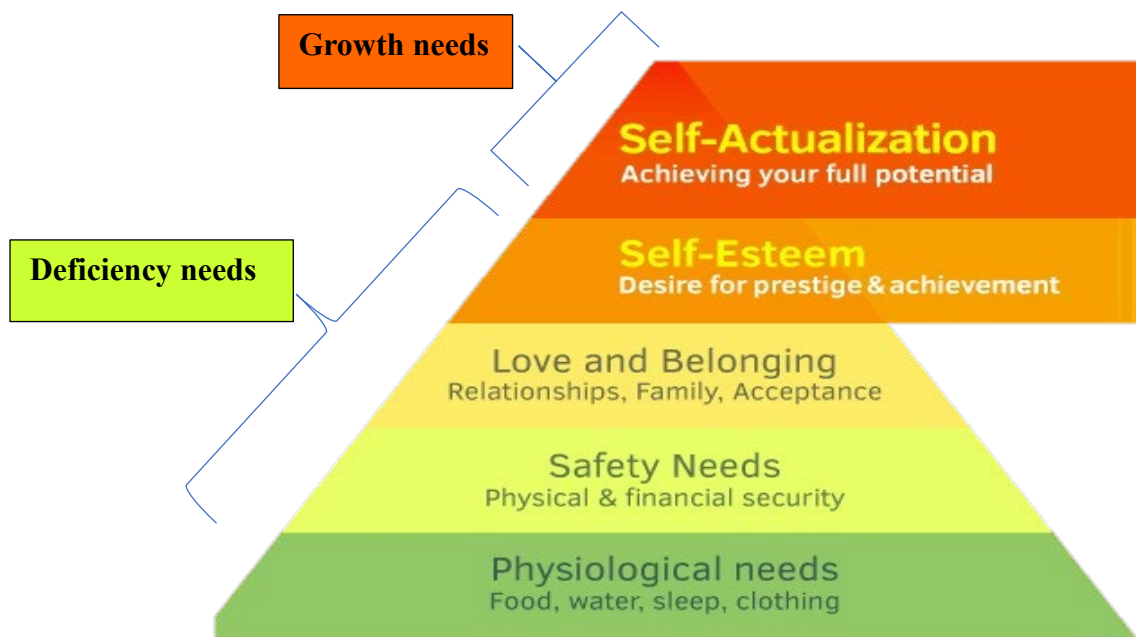


Figure 1: Edited version of Maslow's Hierarchy of Needs

(Source: <https://apricotbranding.com/the-hero-archetype-empower-and-inspire/>)

As can be seen in the diagram, the five levels of these needs are typically depicted as a pyramid, each representing a different category of needs from the most basic to the highest, described as follows:

- **Physiological needs** are at the base of the pyramid, and they include needs for shelter, food, and clothes. Maslow suggested that when these are not met, they take precedence over all other needs. This correlates with his concept of dominance.
- **Safety** relates to both physical and economic security. Physical security encompasses protection from harm, and economic security includes financial stability, income, and job security.
- **Love and belonging** are the third level and includes social and interpersonal needs. Human beings are inherently social creatures and desire to be part of intimate relationships.
- **Self-esteem** is about self-confidence and self-respect, and recognition from others is critical at this level.
- **Self-actualization** represents having reached one's full potential. This level concerns achieving personal goals. This confirms Maslow's argument that each level builds upon the foundation of those at the lower levels.

Maslow further categorised the five levels into two broad types, namely, deficiency needs and growth needs, as shown in Figure 1 above. The four lower levels in the pyramid are grouped as deficiency needs because they are essential for survival. The fifth level represents growth needs and focuses on personal development. These broad categories provide a framework for understanding how the different needs motivate people as they progress through life. Maslow suggests that people possess the inner resources for growth, and it is through constant self-improvement and self-understanding that they achieve their ultimate goals. The link with Knowles's argument about self-direction is clear. This study sought to explore if attending the INCT programme addresses either of the two broad types of need.

There have been several critiques of Maslow's hierarchy. It is argued that Maslow's theory did not recognise that social behaviour does not exist at birth, but it is socially constructed – as are needs. It is also argued that needs are not hierarchical, as Maslow claimed. For example, Biney (2017) argues that needs are not categorised in a hierarchical order in many African societies and argues that people do not necessarily satisfy lower-level needs before moving to higher level needs. However, findings in the study by Shi & Lin (2021) concurred with Maslow's theory that needs "should follow the low-high order to test human needs" (p. 232). It would be worth noting if my study concurs with Maslow's hierarchy of needs from low to high order.

Furthermore, Pearson and Podeschi (1999) pointed out that Maslow's key assumptions are parallel with US mainstream culture. He argues that the concept of individualism is not questioned, as it is ingrained in Americans. It is thus suggested that Maslow's theory is ethnocentric and based on Western ideology, ignoring other societies where collectivism is more predominant than individualism.

Rutledge and Lieberman, cited in Yurdakul and Arar (2023), have critiqued Maslow's theory on the basis that it does not emphasize the importance of social connections, and that needs are not hierarchical but cyclical in following each other.

Noltemeyer et al. (2021) argue that whilst Maslow's theory has been critically analysed and received theoretical attention, and even widely incorporated in social service practice, it has not been adequately tested among children and adult learners. Thus, although Maslow's hierarchy remains popular as an explanatory theory, it lacks the robust empirical validation needed (Noltemeyer et al., 2021).

However, according to Kenrick et al. (2010), Maslow's theory is of new significance if combined with later theoretical developments. They argue that a new updated and revised hierarchy of human motives must build on theoretical and empirical developments at the interface of evolutionary biology, anthropology, and psychology.

By using Maslow's hierarchy of needs as a framework for factors contributing to successful outcomes. Freitas and Leonard (2011) found that the framework assists in the identification of organisers to successful academic implementation. Similarly, in this study the use of this theory is used to help explain what the adult learners considered as a need for them to attain the INCT skills.

2.4 Conclusion

This chapter explored the legislation and policies applicable globally and in the South African adult education context. It also focused on literature related to the provision of adult education in the workplace. This was followed by a discussion on research related to the relationship between training and employee performance. It concluded the first part with a discussion of research studies on the influence of ICT on the work and personal lives of employees.

The theoretical framework discussed in the second part of the chapter, based on Knowles's andragogy and Maslow's hierarchy of needs, outlines how adult education needs various linked processes that surround how an individual makes decisions as influenced by their personal needs and circumstances. The next chapter is a focus on the research methodology used in this study.

Chapter 3: Research methodology

3.1 Introduction

This chapter presents the research methodology used in the study, discussing the research paradigm, research approach, and research style used and how these are relevant to the study. The approach to data collection and methods of data analysis are also explored, ending by considering issues of data quality and research ethics.

3.2 Research paradigm

The study is underpinned by a qualitative research design using the interpretivist paradigm to understand individual employee experiences. Mack (2010) and Scotland (2012) point out that interpretivist researchers seek to understand human behaviour rather than explain it. Creswell and Poth (2018) further explain that the goal of the interpretivist paradigm is to rely on the participants' views of the situation being studied by using broad and general questions so that the participants can construct their meaning of a situation through discussions. The interpretivist paradigm is criticised by Cohen et al. (2018) for presenting incomplete accounts of social behaviour, as it can neglect the broader political and ideological contexts. This study sought to understand learner's perspectives and make meaning of their experiences on the usefulness of the INCT learning area. The interpretive paradigm was selected for use in this study because of this focus on understanding learner perspectives.

3.3 Research approach

The study aimed to understand employees' experiences of the learning area INCT and how it might have improved their work performance and personal lives. The study thus used a qualitative research design, where words and observation are used as data collection methods as opposed to numbers. Yilmaz (2013) prefers qualitative research because it focuses on process, context, and making meaning through inductive reasoning, by analysing participants' responses. A qualitative research design was used because the study aimed to understand learners' experiences of the learning area in their personal and work life. Qualitative research can also potentially answer questions not originally asked, thereby providing more in-depth and detailed understanding – in this case, of the experiences of learners. This study was characterised by openness of the researcher towards the participants.

3.4 Research style

There are several different research styles that a researcher could use within a qualitative, interpretivist study, for example, narrative research and participatory action research. In this study, I chose case study as the most appropriate research style because of its relevance.

A case study is defined as “a systematic and in-depth investigation of a particular instance in its context in order to generate knowledge” (Rule & John, 2011, p. 4). Scholars argue that case studies can be classified according to their purpose. Yin (2003) identified exploratory, explanatory, and descriptive as the three ways of classifying case studies. This study falls within the exploratory class because I sought to explore the learners’ perceptions on the efficacy of the INCT. As mentioned in Chapter 1, this phenomenon has not been investigated. This study thus concurs with Rule and John (2011), that an “exploratory case often examines a phenomenon that has not been investigated before” (p. 8).

Rule and John (2011) further identify two different kinds of case based on the purpose of the study – that is, either instrumental or intrinsic. An intrinsic case study focuses on the case itself because of its interest and not simply because of the issue or phenomenon, whereas an instrumental case study examines the case to explore a broader issue or phenomenon. This study follows the instrumental method, where the issue (INCT) was identified first, and the case (employees) was selected afterwards to examine the issue. The focus of the study was on INCT as a learning area, and this led me to select a relevant case, which is the employees registered at a CLC. In this way, my study is an instrumental case study as defined by Rule and John (2011). As I have mentioned in Chapter 1, the reason for selecting the case was because at the time of embarking on the study I was employed as a provincial AET coordinator, and this would have given me insider knowledge and easy access to the participants. Although the case study research style has been criticised for its poor generalisability, Rule and John (2011) argue that “choices about methodology must be guided by the principle of fit for purpose” (p. 8). The use of a case study was fit for purpose, which was to generate in-depth understanding of learners’ perspectives of the usefulness of the INCT learning area and how this experience improved their work and personal lives.

The use of case study was also motivated by the proposal by Guba (1981), that the research results in a case study can be transferred to other contexts. Instead of focusing on generalisability, Guba (1981) suggested that the trustworthiness of qualitative studies is achieved by giving attention to the study's transferability. Guba further suggests that the use

of thick descriptions of the case and context also improve the quality and trustworthiness of a case study. I discuss these issues further.

3.5 Data generation

The data collection process includes identifying and setting the limits for the study through sampling and recruitment; collecting data through, for example, unstructured or semi-structured interviews, documents, or visual materials; and establishing the procedure for recording information. Data generation refers to creating or producing new data from primary sources. This is done through various means. In this study, data was generated through interviews with adult education learners as is outlined in discussing from whom data was collected and how.

3.5.1 Sampling

According to Flick (2009), sampling is connected to decisions about which persons will be interviewed and from which group they will come. Cohen et al. (pointed out that researchers “need to be able to obtain data from a smaller group or subset of the total population... (however defined) under study” (2018, p. 202). The total population of this study was eighteen (18) learners who were enrolled for the INCT learning area. Purposive sampling was used in this study. Purposive sampling is used in research to deliberately select a segment of the wider population to include or exclude from the sample (Cohen et al., 2018). Flick (2009) explains that purposive sampling is used in qualitative evaluation; however, he also points out that the problem associated with purposive sampling is the “fuzzy criteria for when to stop sampling” (p. 142).

Purposive sampling was selected for this study because it provides greater depth than many other sampling methods. After all, the participants have in-depth knowledge and experience of the phenomenon. The participants were purposefully selected from learners who had attended the course over the years. Five employees were selected as adult learners from a hospital in eThekweni, KwaZulu-Natal. The criteria for selection were that they must have attended INCT4 classes at the CLC and had two or three years of applying the skills learned. I limited my study to five students of the course because of the time constraints under which the data had to be gathered.

3.5.2 Data collection method

Data generation methods are the detailed procedures used to collect and analyse data. They are affected by the philosophical assumptions of the researcher. According to Yilmaz (2013), the use of systematic data collection procedures influences the credibility of a qualitative study for producing reliable data. Yilmaz argues that to generate rich data, the researcher must observe behaviour and interview people face-to face when collecting data.

In this study, interviews were used to generate data. According to Cohen et al. (2018), focused interviews are used to gather data on the subjective experiences of the people exposed to the situation. Interviews are a flexible tool for data collection and allow for multi-sensory channels to be used: verbal, non-verbal, visual. They also allow for extensive opportunity for asking and probing. Interviews were preferred because they allowed the participants the opportunity to express their experiences of their learning and work environments, and to explore their perceptions of the INCT4 course (see Appendix 2).

Research theory identifies a few different kinds of interviews, viz. unstructured, semi-structured, and closed/structured. Dana et al. (2013) argue that the unstructured interview is one of the best ways to uncover important information that a researcher may plan to gather. Depending on the objectives of the study, unstructured interviews can involve a complex interaction between researchers and interview subjects for the purpose of collecting data pertaining to cognitive processes, social worlds, and experiences.

However, unstructured interviews do have severe limitations: they can be time consuming and can gather information that might not be relevant. This study thus used semi-structured interviews. Kakilla (2021) states that semi-structured interviews have advantages in that they provide a good understanding of the interviewee. They are also very flexible and more comfortable to the participant. Kakilla further argues that the guided conversations between the interviewer and participant provide a good platform to explore and explain the phenomenon under study. According to Kakilla (2021), semi-structured interviews in critical qualitative research assist to uncover knowledge through interaction, conversations, and subjects from different life experiences. The semi-structured interview allows the shared stories and life experience to be interpreted to expand the knowledge into multiple platforms.

This kind of interview was adopted for this study because it is practical and allows in-depth conversations. It also allows for follow up on all verbal and non-verbal responses during its course, which was important because I was not able to conduct follow-up interviews due to

time limitations and distance from the participants. I conducted interviews face-to-face rather than online and used English and isiZulu during interviews to avoid barriers and limited conversations. The interviews were conducted largely in isiZulu, audio-recorded, and then translated and transcribed in English.

3.6 Data analysis

According to Creswell & Creswell (2017), qualitative data may be analysed by coding the data and collapsing the codes into broad themes. Quantitative data is analysed in terms of statistical results. Mixed methods data analysis combines these two approaches to analysis.

Since mine was a qualitative study, the collected data was analysed using thematic content analysis by identifying categories and themes to indicate relationships between different parts of the data and ensure that the integrity of the original context was preserved. I analysed the data using both inductive and deductive content analysis. Inductive analysis was my primary method, followed by deductive content analysis using concepts and themes already identified from the conceptual framework. Inductive content analysis (ICA) is a qualitative method of analysis that researchers use with text-based data, either written transcripts of verbal interactions or documents created in written form, to develop theory and identify themes (Vears & Gillam, 2022). In this study, I analysed the data inductively using the following process:

1. Translating and transcribing the audio-recorded data from isiZulu to English.
2. Examining the data was to identify patterns and recurring ideas whilst minimising bias.
3. Creating a data coding system consisting of a set of codes to categorise the data from responses based on research questions and initial ideas.
4. Working through each participant's responses and tagging them with codes, creating new codes to add to the system as I went through the data.
5. Identifying recurring themes related to codes to form cohesive, overarching themes.

The conceptual framework using Knowles's conception of andragogy and Maslow's hierarchy of needs was further used to analyse the findings of the study and make conclusions and recommendations for further research.

3.7 Research quality and limitations

The qualitative nature of the study required that trustworthiness be maintained to guarantee quality research. According to Stahl and King (2020), qualitative research is uniquely positioned to provide researchers with process-based, narrated, storied data that is more closely related to the human experience. However, the trustworthiness of qualitative research is sometimes debated. Qualitative researchers strive for trustworthiness, which means that when the written work is interpreted one would get the sense of confidence in what the researcher has reported. This requires that issues of credibility, transferability, dependability, and confirmability are addressed when designing the study and collecting data.

As far as credibility is concerned, Cohen et al. (2018) propose that sampling decisions may determine the quality and generalisability, or transferability of the data collected and how to collect such data. The purposive sampling employed in this study ensured that I had participants who were able to talk from experience about their perceptions of the INTC4 course and had a contribution to make towards understanding the phenomenon under study. This study used my effort as a researcher, the commitment, and values I hold, to build trust with the participants to ensure that what they told me was 'true'. The data collection tools were checked with my research supervisors before actual data collection.

To ensure that transparency and authenticity are maintained in this research, I used my understanding of the phenomenon to clearly indicate where the interpretation came from, supported by the fact that I was in the field, by providing the transcripts of my interviews (in Chapter 4) and directly quoting from these in my analysis and discussion.

In the matter of transferability, it is important to note that qualitative research is not generalisable (in particular, case study research). Transfer is only possible when a thick description provides a rich enough portrayal of circumstance for application to others' situations. Thus, transferability relies on the researcher's thick descriptions that would include contextual information (Stahl & King, 2020). As a researcher, I have tried to provide sufficient context to allow for this.

In interpretivist research, positionality is also of importance. According to Holmes (2020), positionality describes an individual's world view and the position they adopt about a research task and its social and political context. It thus also indicates the position that the researcher chooses to adopt within a given research study, influences how the research is

conducted, its outcomes, and its results. At the time I embarked on this study, I was involved in the coordination and monitoring of the adult learning programme in the KwaZulu-Natal Department of Health. This meant I had unique insight into some of the issues; but also needed to be acutely aware of my own positionality. Positionality is the relationship between the researcher and the researched (Cohen et al., 2018). This relationship is often a case of those with more power, information and resources research those with less. Holmes (2020) further identify three areas in which positionality is normally identified i.e. the subject under investigation, the research participants, and the research context and process. However, I had no vested interest in the outcome, and indeed, as stated in Chapter 1, I was no longer in this position by the time I collected my data.

The arrival of COVID-19 in 2020 and the related physical distance restrictions posed limitations for conducting face-to-face interviews, as the department was wary of public contact with their staff. This delayed the granting of ethical clearance, and interviews were thus only conducted in 2022 when the restrictions were lowered. By this stage, I had changed employment, and moved to the Gauteng province. This meant that I had to plan the interviews to take place in one session and collect all the data needed to answer the research questions during these interviews (rather than allowing for follow-up).

3.8 Ethical considerations

Ethical issues such as confidentiality, informed consent, and voluntary participation, and right to privacy were maintained throughout the study. These ethical considerations were carefully managed and maintained during data generation as well as during reporting.

Confidentiality means that information about participants is used in a manner that makes it impossible for other people to identify them. Confidentiality was maintained by withholding participants' real names and other identifying characteristics. The participants are referred to by use of 'Participant 1', 'Participant 2, and so forth, to maintain confidentiality and protect their identities. In relation to voluntary participation, Cohen et al. (2018) and Flick (2009) emphasise the importance of gaining the informed consent of respondents, which requires the researcher to make it clear what they are consenting to before any questions can be asked. In my study, I provided all participants with information about the study and its objectives before asking for their signed informed consent (see Appendix 1). I ensured that participants were aware that their participation was voluntary, and they could withdraw at any time, and that their responses to my questions would be anonymous.

Punch (2013) highlights the importance of guarding against blurring the dividing line between research data and normal professional data. He refers to special ethical issues which need to be considered. He points to informed consent, confidentiality, and protection of identities as important ethical considerations. This issue also affected my study since I had to distinguish between collecting data for research purposes and data that had been collected as part of my professional work. This was made easier by the fact that I had left my professional post by the time I collected the data.

3.9 Conclusion

To conduct this qualitative case study, working within an interpretivist paradigm, I selected semi-structured interviews to generate the data necessary to answer my key research questions. In the next chapter, I present the data gathered as part of this study.

Chapter 4: Presentation of the data

4.1 Introduction

This chapter presents the data from the participants interviewed, in the form of the translated, transcribed interviews. The analysis and discussion of the data is provided in detail in Chapter 5.

As discussed in the previous chapter, I purposefully selected five employees from one hospital in eThekweni, KwaZulu-Natal. The criteria for selection were that the participants must have attended INCT4 classes at the CLC and had two or three years of applying the skills learned. The table below presents demographic information about the five, and the role they played in the hospital at the time of the interviews.

Name of participant	Sex	Age	Job role
Participant 1	Male	50+	Cleaning supervisor
Participant 2	Male	50+	Cleaning supervisor
Participant 3	Female	45+	Cleaner
Participant 4	Female	50+	Cleaner
Participant 5	Male	30+	Cleaner

Because of the time pressure under which the interviews were conducted, as discussed in the previous chapter, two of the interviews were conducted with two participants at a time.

4.2 Participants 1 and 2

Both participants were males in their mid-fifties.

Researcher: As I have explained, this research is about the learning area INCT that you did at [the CLC]. Are you more comfortable with English or isiZulu?

Participant 1: Carry on like that.

Researcher: Just like this? Okay, alright. What made you decide to join this learning area, what happened that made you decide to attend this class?

Participant 2: I wanted to know the basics of a computer and...

Researcher: Okay, and Participant 1?

Participant 1: I didn't have any knowledge of a computer, but luckily, they heard our cries and complaints about not being able to use the computer and helped us.

Researcher: Since you guys complained, this means that you saw that there were some areas where you guys were left behind?

Participant 1: Yeah, there were areas where we were being left out. We work with people, we're supervisors. But with the computer, we were unable to use it. Now we're able to open it and use it, but then it was difficult to even open it.

Researcher: Okay. Are both of you supervisors?

Participants 1 and 2: Yes.

Researcher: Okay. So, you said you were not able to even open the computer before you joined the class – but did you have any knowledge? Maybe you didn't learn it from anywhere, but it was there? Or there wasn't any knowledge at all?

Participant 2: There wasn't any knowledge, just like learning a phone, it is the same as the phone we use.

Researcher: Okay, so, you saw that there's a link between learning a phone and a computer.

Participant 1: Yeah. To get a clear picture.

Researcher: Okay. So, you decided and got an opportunity, when you heard HR say there would be different classes, then you decided to join these classes... At the back of your minds, what did you think you would gain from learning in any of these classes?

Participant 2: Times today have changed, you now need to have knowledge about these computers, and where you are headed. It helped me a lot when I went to SARS [South African Revenue Service], when they said we must register. I saw that it was easier because I was able to do it myself. Then I was able to query about the small details, because all the skipping, going forward, you did something wrong here, delete and go back. Backspace and all those things were things I had no prior knowledge of. But I got happy when I got to SARS and everything was easy, I was very prepared, and I did everything myself and when I was confused about

something they would assist me which made it easier.

Researcher: Are you talking about the online e-filing?

Participant 2: Yes, e-filing at SARS when you go there. I saw when I arrived that this is what I've been learning and I'm able to do it. It's easy to do now and I'm not having any difficulties anymore. Yes.

Researcher: Okay; and Participant 1?

Participant 1: For me, there were things I didn't know, even things such as the names for the computer, knowing what such and such is. But after that I can tell you confidently everything. So that, how can I put this, makes my children know that there's something dad has knowledge of.

Researcher: Yes.

Participant 1: That has a positive impact at home because we had that thing when kids are asking questions – we have a problem, we seem like dads that know nothing, and today's children have a lot of knowledge there and there, so now we get left behind.

Researcher: So, it boosted your confidence?

Participant 2: Yes.

Participant 1: Too much.

[At this point, the interview was interrupted by the arrival of Participant 3, who was asked to wait outside]

Researcher: Okay. So, we can see that it helps us with doing minor tasks such as going to SARS; I'm sure even at the banks?

Participant 2: You're able to punch everything correctly, even with phones.

Researcher: Yes.

Participant 2: When you have the app. I didn't know any of that. With your phone you can download the app and be able to do it.

Researcher: Cell-phone banking.

Participant 2: Yes, cell-phone banking.

Participant 1: And being able to store information, having that thing that you have, a certain thing that when you need it you can find it. Maybe you've stored it there wherever and you know it's available.

Researcher: Where you've saved it...

Participant 2: Memory card or wherever.

Researcher: Yes.

Participant 1: And now that I have the knowledge, whenever I'm looking for something, I go back to where I saved it.

Researcher: So, you also learnt how to save in the class? So, when you write your information, then you save it, then go back to it. Yes. So, you really enjoyed it. Let's move forward. So now you've completed your studies. What you thought you were going to learn; did you find it? Did you learn it?

Participant 1: Yes, because we did the whole course, that knowledge helped us a lot. Yes, we got everything, and then we went back to our respective jobs where we can do things such as set the Employee Performance Management and Development System (EPMDS) for people which is important. We're also able to write a letter to HR when we want something, those things, write that letter and print it and give it to someone because I've written it, things like that. Because we also work with cleaners. Uhm, sometimes there are letters that are needed. There's also EPMDS for them, so now we're able to do them things like that.

Researcher: Okay, maybe like, don't you guys do timesheets and rosters and so on, and now you're able to do with computers?

Participant 2: ... at the end of the year we're able to draw up a calendar for each person so that they can see how many leave days they took. There's no stress because they can monitor it, and when it's time for you to draw up a form, everything at the end must balance and must be the same.

Participant 1: ...when we order, there are things that we can't order internally such as polishing machine, we must draw up an NSI, things like that. So now you can do the NSI and send it to the correct people The company After every six months you must draw up an NSI for that specific company, after six months the NSI is

already done.

Researcher: So, all of that you do on the computer?

Participant 1: On the computer, yes.

Researcher: Let's maybe go back a bit. There's the issue about using the computers for us at home; because right now we were speaking about using it work, so now you're able to use the computer and the phones. So that helped.

Participant 2: Yes, it helped, because even at home we can buy the kids laptops... and be able to tell them how to use certain things.

Participant 1: And how to hide things in the USB.

Researcher: It's good to hear that you can now hide things and then knowing how to do so.

Participant 2: You get encouraged whenever the child asks you, because these things weren't around during our times.

Researcher: Okay. At work did you have computers before, or did only get them now after you've learnt it?

Participant 2: It was there, just like furniture; we just didn't use them. We'd ask people to do that specific thing that needed the computer, and we'd just sign them.

Researcher: Okay.

Participant 2: We'd request things from HR and then come just to sign.

Researcher: So, I'm sure that boosts you to show that you know your work, and not come when it's time to sign like you know nothing, because the work you've completed yourself, you know it very well.

Participant 2: Exactly...

Researcher: Okay, so we've spoken about the duties you do and that they need the computer. It was always available, but you guys didn't use it, but now you use it fully. So now whenever you get to work you open your laptop. We also spoke about the computer at home and I'm happy with that. So now we can say that attending these lessons improved the way you work. Can you explain [anything more about] how it has improved from what we have already spoke about?

Participant 1: As the other participant has mentioned, certain things we'd ask other people to do, but now we're able to do these things, which shows that we do have the knowledge and the understanding and do it on your own.

Researcher: You don't want to add anything, Participant 2?

Participant 2: I can say that it has opened our minds and we've come a long way. We were always focused on one thing, but since the classes, like I've said at the banks, SARS, and other places, we can now do things on our own. You come back and realize that this is what you've been learning.

Participant 1: Like using the phone to send money in the comfort of your own home. I didn't know how to do that, and now I'm able to do that, and then afterwards call and ask them if they have got it.

Participant 2: Ask them if they've received the message.

Participant 1: It's part of the things we learnt.

Participant 2: Using your Capitec [app].

Researcher: Even paying off debts.

Participant 1: Even when you don't have the computer. I didn't know how to do this.

Participant 2: You end up not knowing anything and your mind going all over the place.

[At this point, the interview was again interrupted by the arrival of other interviewees, who were again asked to wait outside.]

Researcher: Okay, we spoke about sending money and paying debts, that it has helped us. So, is there anything else you'd like to learn about or is there anything you've learnt after learning the computer, to broaden your knowledge or something that would help at work?

Participant 1: There's nothing else that we've learnt besides things we've learnt after the classes, but when we came back there was a difference in our work. But we didn't attend any other courses after that.

Researcher: Okay, are there any other courses you'd like to attend that will help you?

Participant 2: We only did Word there, so if it is possible, I would like to do the one with

calculations.

Researcher: Excel?

Participant 2: Excel, that's where we were left behind.

Researcher: Excel?

Participant 2: Yes, because we don't know how to calculate.

Researcher: Yes, because Excel also helps to minimize the work.

Participant 2: Yes, for the calculation to be easy, like how much stock we gave them.

Example: we gave Mthembu this many 5 litres, so then we know how many drums were used for the chemicals. Those things would be easy, and other different calculations, there are things you see such as taking leave. Excel helps there.

Researcher: I think we've spoken very well, thank you so much about the information you've given me.

4.3 Participant 3

The second session of the interview was held with a female employee in her late forties. She was upset because she had not received her statement of results since completing the course in 2019. However, she was willing to participate in the interview. The first part of the interview focused on the issue of her certificate, and then turned to the course.

Participant 3: It was nice; indeed, I don't want to lie. We enjoyed [the course].

Researcher: Okay, I'd like to ask you a few questions about how it helped you. Firstly, what was the reason for you to decide to join this class, what happened?

Participant 3: Okay, what made me join this class for computing was because currently I'm working for the department of IT. If there's a vacant computer, when I ask for permission to type a CV or anything of that sort, they tell me to go to documents, and do this and that. I wanted to learn and have a certificate. I decided that its better if I do classes for the computer so that I can have more knowledge.

Researcher: So, it's not like you can just do one thing.

Participant 3: Yes.

Researcher: So, were you fulfilled after attending these classes?

Participant 3: Yes, I was fulfilled because [before] I didn't know, if I wanted to do space or when I am typing, where do I need to go, and how to type; because our teacher used to say that when you are typing, you need to use both hands, and it was good advice.

Researcher: Okay, so I want to know where the computer helped you in your personal life and your life.

Participant 3: In my personal life I managed to buy myself a laptop and use it, because I already have the knowledge of how to use it, and it's the same as the computer. And in my work life, when Meditec was going online, and they had advertised that there's a system known as Meditec, I asked my manager if I could do data capturing, and she gave me those simple forms - because I already knew how to use the computer and did some training. And now that I've done it and I didn't get the opportunity to get the certificate, she saw when I went to write the exam and then after I didn't get to help her with anything.

Researcher: So, you don't practise anymore? What's the reasoning behind you not helping her anymore?

Participant 3: I got frustrated, because I went to go and study the computer, but I didn't get the certificate. Even though it has helped me in a lot of things, when I didn't know how to do a specific thing, she would tell me. She was there like a second teacher to me. You're understanding what I am saying? Even when they would ask questions about the computer, I would be the first to answer because there were things I already knew in advance, and people would say that I already work in that department.

Researcher: You had that advantage? My next question was going to be whether you had any access to a computer at work, but you already had it. Did your work need you to use a computer daily?

Participant 3: My job is a cleaner, but if there's a computer lying around ... but now there are no spare computers, because they are used throughout the whole hospital. If I had homework, I would use the computer and complete the work and I'd ask, and they would assist me on how to do it and print it out for me because I didn't even know where to print it. Things like that. If they say do italic writing, you get there and do the italic because they show it to you. I had all those advantages.

Researcher: Okay, so you've mentioned before that your job doesn't need a computer daily, but you could say that your studies at [the CLC] improved your life?

Participant 3: Even right now, I would open a computer, I would still remember. I remember most things.

Researcher: Okay, thank you so much for answering my questions. Is there anything else you would like to study?

Participant 3: Anything, learning has no age.

Researcher: Once again thank you for your participation.

4.4 Participants 4 and 5

The third session of the interviews was held with two participants, a female in her fifties and a male in his mid-thirties.

Researcher: I wanted to know what happened that made you decide to join this class for computers. Did you maybe see that you were lacking some knowledge, or because an opportunity presented itself you decided to join?

Participant 4: It was the opportunity and to improve.

Researcher: What did you want to improve?

Participant 4: We were promised that if we did these lessons, they would look for opportunities for us to move into better positions.

Researcher: In other places? So, you saw the opportunity and you decided to grab it and you saw that you could improve yourself. What type of improvement did you want, was it to improve your knowledge or improve in your job?

Participant 4: To improve in the job, so the salary increases.

Researcher: Participant 5, you can also answer in areas you see fit. So, the question I was asking is what happened that made you decide to join this class for computers. Did you see that there was something lacking in terms of computers, or did you want to improve a certain part in your life, personal life, or work life? What happened that made you decide to join this class for computers?

Participant 5: To improve and to upgrade the job we're doing. It was training from

government, and it is part of credits to someone who is working for government. It is supportive.

Researcher: So, before you joined the class for computers, did you have any knowledge of the computer, or was it new to you?

Participant 4: I didn't know anything.

Participant 5: I knew the computer because I've learnt it before, but now, I've learnt it again from the government. I think it's something good.

Researcher: In your current jobs, do you ever need to use the computer?

Participant 4: I never need to use the computer.

Participant 5: I sometimes need to use the computer.

Researcher: So, before you went to class you used to use it?

Participant 5: In my current job I didn't use it because it wasn't available. I used to ask for it from other people that had computers.

Researcher: At that time, you asked for it because you didn't have your own, but was it a necessity to use it?

Participant 5: Yes. The need to use it was there.

Researcher: So now do you have one that is allocated to you?

Participant 5: I had one to use, but since the offices are close to the beach, they easily die. And then they said we should wait, there are a lot of people who had similar problems with their computers just dying.

Researcher: So, you went back to using papers?

Participant 5: Yes.

Researcher: Okay. So, after learning the computer, did the knowledge you acquired help with anything?

Participant 4: Yes.

Researcher: Please name them.

Participant 4: I'm able to save my documents and create a CV and save it, so whenever I need

it, its saved and then I print it out.

Researcher: We see the improvement because you said you never used to touch the computer, but now you're able to print and save. The other participant did say that he could use the computer before, but regarding that class can you see improvement, or everything was the same after the class?

Participant 5: There is some improvement, such as using Microsoft Word which is used regularly, and it's the basic thing, and they emphasise the use of it and taught it to us, everything that had to do with Microsoft Word such as writing a CV.

Researcher: Is there anything specific that you learnt?

Participant 5: It helped me a lot, but they only stick to Microsoft Word because it's the basic. Things such as merging an email is not there, and Excel. I already knew some of the things, but in the class, they only taught things I had already known. But as someone who doesn't use the computer that much, attending those classes improved my typing skills because I overlooked it. And my hands got used to typing.

Researcher: That's all that matters, and it's important that you didn't stop just because you already knew computer.

Participant 5: It's the same as someone who goes to driving school even though they can already drive. At driving school, you recognize the things you didn't know. I learnt a lot from Microsoft Word that I had no prior knowledge of, such as shortcuts and when you press both your hands should be working.

Researcher: My next question is, if there is an opportunity to learn again, what would you want to learn?

Participant 4: With my age, no one will want to hire me.

Researcher: And to study not for a job but for knowledge?

Participant 5: Anything that arises.

Researcher: So now you have computers at home you can use. So, things such as online banking, e-filing at SARS, you can now do it?

Participant 5: Yes, even over the phone.

Researcher: So, the computer helped you guys to use the phone to be quick and see things?

Participant 5: A lot.

Researcher: Thank you for making yourself available and answering the questions.

4.5 Conclusion

This chapter presented the data, in the form of the translated and transcribed interviews with the five participants. In the following chapter, I explore and discuss this data, based on my analysis, and present my findings.

Chapter 5: Analysis, discussion, and findings

5.1 Introduction

In Chapter 4, I presented the data generated as part of this study from the participants who were part of the adult education intervention. In this chapter, I reflect on the data, drawing on my inductive analysis, literature review and theoretical framework.

The chapter is structured around a few themes derived from my inductive analysis and the deductive analysis from the theoretical framework. I discuss each of these in relation to the data (as presented in Chapter 4), the theoretical framework, and the literature (as discussed in Chapter 2).

In trying to answer the question on the views of learners regarding the value of skills learned in INCT, five sub-questions were asked. These questions intended to establish reasons why they decided to enrol, whether they had any access to computers, and what their expectations were before joining the classes. Lastly, they were asked whether their expectations were met, and whether the learning improved their personal lives.

5.2 Inductive analysis

5.2.1 Reasons to enrol in the INCT classes

The data shows that all participants decided to join the classes for a reason. Their reasons vary from the desire to improve their computer knowledge, the need to improve their work performance, to hoping to improve their employability. For example, Participant 2 stated that his reason was to know the basics of a computer. Participant 1 stated two reasons: firstly, he wanted to get computer skills because he did not have any knowledge of a computer, and secondly, he felt left behind by his children. Below are quotations from both participants:

I wanted to know the basics of a computer and... (Participant 2)

I didn't have any knowledge of a computer. (Participant 1)

...today's children have a lot of knowledge there and there, so now we get left behind.
(Participant 1)

Interestingly, Participant 3 had a slightly different reason for joining the class. Participant 3 was hoping for an opportunity to gain a certificate that will give her access to work opportunities in the hospital's IT department. She stated:

Okay, what made me join this class for computing was because currently I'm working for the department of IT. If there's a vacant computer, when I ask for permission to type a CV or anything of that sort, they tell me to go to documents, and do this and that. I wanted to learn and have a certificate. I decided that its better if I do classes for the computer so that I can have more knowledge. (Participant 3)

Participant 4 stated a similar reason for joining the class: "We were promised that if we did these lessons, they would look for opportunities for us to move into." The most surprising reason was stated by Participant 5, who said: "To improve and to upgrade the job we're doing. It was training from government, and it is part of credits to someone who is working for government". The reasons stated by the two participants are linked to job progression, credit accumulation and transfer. Credit accumulation and credit transfer is a system used on the NQF to facilitate lifelong learning and access to the workplace. This means that these participants could get recognition for the access to further learning and access to further employment.

My conclusion is that reasons for joining INCT classes are different, as shown so far in this discussion. According to the research findings, improving work performance was a key driver that made the learners want to enrol into the INCT programme. The desire to be recognised at the workplace and contribute to the organisation's strategic objectives motivated the learners to commit to adult education. This confirms what UNESCO (2015) and Kaplan et al. (2017) argue as reasons for joining adult education classes. Kaplan et al. (2017) emphasise that learners could make decisions about subject and occupational development, while UNESCO (2015) states that adults may enter education to develop new vocational skills and expertise to adapt to changing labour market conditions or to change career, or for continued professional development.

However, Participant 5 joined because the programme was provided by the employer, and this concurs with Reder (2020), who argues that the workplace can become a powerful learning environment. As discussed in Chapter 2, the KwaZulu-Natal Department of Health

encourages adult learners to enroll in the INCT learning area to empower employees (KwaZulu-Natal Provincial Government, 2012b).

5.2.2 Learners' prior knowledge of computers

The data shows that some participants had prior knowledge of computers, whilst others did not. Participants 1, 2 and 4 did not have any knowledge of computers before attending the classes. This motivated them to join the classes and they saw the opportunity to acquire computer skills, as they are important in their day-to-day lives:

I didn't have any knowledge of a computer. (Participant 1)

There wasn't any knowledge, just like learning a phone it is the same as the phone we use. (Participant 2)

I didn't know anything. (Participant 4)

The correlation that I can make between Participants 1, 2 and 4 is that all of them are above 50 years of age, and this may explain the reason why they may not have had any prior knowledge of computers. Participants 3 and 5 are between ages of 30 and 45, and both indicated that they had prior knowledge of computers before joining the INCT class. They mentioned in the interview that they had learned about computers, but had not had the opportunity to enhance their skills:

I already have the knowledge of how to use it. (Participant 3)

I knew the computer because I've learnt it before but now, I've learnt it again from the government, I think it's something good. (Participant 5)

It was also interesting to note that although these participants already had prior knowledge, they still participated and gained skills from the programmes:

It helped me a lot, but they only stick to Microsoft Word because it's the basic, things such as merging an email is not there and Excel. I already knew some of the things, but in the class, they only taught things I had already known; but as someone who doesn't use the computer that much, attending those classes improved my typing skills because I overlooked it and my hands got used to typing. (Participant 5)

It's the same as someone who goes to driving school even though they can already drive. At driving school, you recognize the things you didn't know. I learnt a lot from

Microsoft Word that I had no prior knowledge of such as shortcuts and when you press both your hands should be working. (Participant 5)

The responses from the interviews mentioned here concur with UNESCO's (2019) argument that basic digital skills should be part of basic education and are essential for development, and with Nafukho et al.'s (2005) claim that INCT can be used to positively address access issues and open more opportunities for adult learners. The findings of this study have also confirmed that computer skills are for young and old, as seen between the participants and their different age groups. As has been mentioned, the Department of Health clearly views computer skills as an important aspect of basic adult education for their employees. I argue that the learners who attended the INCT learning area at the CLC already had internal motivation to improve both their personal lives and work performance.

5.2.3 The use of ICT in the work and personal lives of employees

As mentioned, learners enrolled into the programme to improve their personal lives and work performance.

The use ICT at work

Both Participants 1 and 2 had been working as cleaning supervisors, without any knowledge of computers or the related skills. As a skills development facilitator, I am aware that supervisors are required to be able to use a computer, but the two participants did not have the skills necessary to use them. During the interview, they mentioned that they are more effective in their jobs now that they have acquired the computer skills gained through the INCT programme:

Yeah, there were areas where I was being left out. I work with people; I am a supervisor. But with the computer, I was unable to use it. But now I can open it and use it, but it was difficult to even open it. (Participant 1)

... at the end of the year we're able to draw up a calendar for each person so that they can see how many leave days they took, there's no stress because they are able to monitor it and when it's time for you to draw up a form everything at the end must balance and must be the same. (Participant 2)

Interestingly, Participant 3 works in the IT department as a cleaner. She had access to computers and even though it is not an inherent requirement of the job, she was allowed to

use available computers. During the interview, she mentioned that before attending classes she used to type personal documents. But after completing the course she was assigned tasks that required her to use her INCT skills:

... in my work life when Meditec was going online and they had advertised that there's a system known as Meditec, I asked my manager to do data capturing and she gave me those simple forms because I already know how to use the computer ...

(Participant 3)

It is also interesting to note that Participant 4 did not have any opportunity to use the learnt computer skills after the training. During the interview she mentioned that she joined the class on the promise that there would be opportunities. It is disheartening to note that there were no opportunities provided after completion of the course. These results support de Wet and Koekemoer's (2016) assertion that ICT has a positive impact on employees' work, in terms of increased productivity and efficiency in the workplace.

The use of ICT in personal lives

The data shows that the course also had a positive impact on the participants' personal lives. There is notable progress in all five participants following attending the INCT classes. After attending classes participants were able to perform certain tasks at a personal level like completing South African Revenue Service (SARS) e-filing or using an online banking system with little or no assistance at all. Participant 1 mentioned that he can now use the cell phone to send money, while Participant 2 is able to perform e-filing:

It helped me a lot when I went to SARS when they said we must register. I saw that it was easier because I was able to do it myself ... there were things I had no prior knowledge, but I got happy when I got to SARS, and everything was easy (Participant 2)

Like using the phone to send money in the comfort of your own home, I didn't know how to do that and now I'm able to do that and then afterwards call and ask them if they have gotten it. (Participant 1)

In my personal life I managed to buy myself a laptop and use it because I already have the knowledge of how to use it and it's the same as the computer in my work life. (Participant 3)

Overall, the results indicate the positive impact of attending the INCT classes, enabling participants to improve their skills and expand their knowledge and enhance their ability to navigate tasks in their personal lives. As discussed in Chapter 2, the desire for personal improvement plays a very critical role in adult learning. De Wet and Koekemoer (2016) argued that use of ICT has improved the way individuals interact and complete tasks and has transformed society. This argument concurs with the results of this study. Consistent with De Wet and Koekemoer's argument, UNESCO (2019) asserts that ICT allows full integration of people into society. Based on the data, I would also maintain that INCT has benefited employees in their personal lives.

5.2.4 Areas of improvement and future learning aspirations

To address the third research question, about how the INCT4-related skills improved the learners' effectiveness in the workplace, four sub-questions were asked. The sub-questions related to how learning INCT has improved the way participants do their work and whether they have any aspirations for future learning.

Work performance improvement

The data shows that all five participants' overall knowledge of computers improved their work performance. Two of the five participants expressed deep satisfaction with how they were able to move from not being able to open the computer to managing employee performance, capturing leave days, and ordering consumables using electronic systems:

Yes, because we did the whole course that knowledge helped us a lot. Yes, we got everything and then we went back to our respective jobs where we can do things such as set the EPMDS for people which is important. We're also able to write a letter to HR when we want something those things, write that letter and print it and give it to someone because I've written it, things like that, because we also work with cleaners. Uhm, sometimes there are letters that are needed there's also EPMDS for them, so now we're able to do them things like that. (Participant 1)

... at the end of the year we're able to draw up a calendar for each person so that they can see how many leave days they took, there's no stress because they are able to monitor it and when it's time for you to draw up a form everything at the end must balance and must be the same. (Participant 2).

Participant 5 shared the same sentiments in terms of how the class was able to enhance his typing skills. Even though his daily job does not require the computer skills, he saw great improvement in his knowledge:

I already knew some of the things but in the class, they only taught things I had already known but as someone who doesn't use the computer that much attending those classes improved my typing skills because I overlooked it and my hands got used to typing. (Participant 5)

Although participants 3 and 4 did not really get a chance to use computers at work, they still felt good about gaining the computer skills. Participant 4 indicated that her daily tasks do not require a computer, but she indicated that attending the classes helped her with typing skills and she is able to save her own documents for future retrieval.

When Participant 3 was asked if she can use the skills learnt, she responded as follows: "I asked my manager to do data capturing and she gave me those simple forms because I already know how to use the computer". What is interesting from her response is her willingness to use the skills by asking the supervisor for tasks to apply the skills. Instead of waiting to be given an opportunity to apply her skills, she had to find that opportunity on her own.

In summary, these results show that in the perception of the learners, the INCT skills did improve competency and participants' ability to use the computer and improve their performance in the workplace. These findings concur with Kaplan et al. (2017), who argues that learners need to acquire digital competency as the fifth competency for lifelong learning.

Another conclusion I draw, is that the reasons for joining the classes were both intentional and purposeful. This concurs with the findings of a study by Ziegler and Sussman (1996), that explored how intentional and purposeful learning of skills such as ICT can improve both work and personal life.

Future learning

Four of the participants indicated that they had a strong desire to learn more if they were given further opportunities. Participant 2, for example, said that he would like to learn Excel, which would help him in his job:

Yes, the calculation to be easy, like how much stock we gave them. Example we gave Mthembu this many 5 litres so then we know how many drums were used for the chemicals. Those such things would be easy and other different calculations, there are things you see such as taking a leave excel helps there. (Participant 2)

Participant 3 also indicated that she would like to learn “anything” because “learning has no age”. She felt that she could still learn more if she were given another opportunity.

Although the participants may have had the desire to learn more, they were also affected by constraints that relate to age, employability and other external factors such as certification. Participant 4 said: “With my age, no one will want to hire me.” As her initial motivation to join the classes was the need for job opportunities, and as this promise had not been fulfilled, she felt despondent. However, it was not established during the interview whether her despondency was due to the unfulfilled promise or the unavailability of opportunities for people her age.

The findings from the study indicate that the adult learners are likely to take opportunities for further learning when provided. As argued by UNESCO (2019), adult education should be both lifelong and life-wide so that it addresses the needs for formal education as well as professional and personal development. This is further supported by Gotta (2019), who argues that adult education must recognise the broader value of education and must facilitate future learning opportunities.

5.3 Deductive analysis

The subsequent discussion draws on the conceptual framework of Knowles’s conception of andragogy, and Maslow’s hierarchy of needs. As mentioned in Chapter 2, both theorists are influenced by humanist educational philosophy. A discussion of the five principles of Knowles’s theory of andragogy: self-concept, adult learner experience, readiness to learn, orientation to learning and motivation to learn, will be the first focus, followed by Maslow’s five categories of needs: physiological, safety, love and belonging, self-esteem and self-actualisation.

5.3.1 Knowles’s Conception of andragogy

According to Knowles (1984), adult learners need to learn knowledge that directly influences their job or personal life. Knowles’s theory focuses on self-directness, whereby adult learners can identify learning goals and resources and implement them to achieve learning outcomes.

As he argues (Knowles, 1984), the concept of andragogy is self-concept which relates inter alia to adults being more self-directive than children. This means that adult learners need to be more involved in organising and evaluating their own training. The study produced results that talk to the evaluation of the learning and not the planning. The participants were not involved in any way in deciding what to learn. However, participants indicated satisfaction with the course and their instruction:

It was nice; indeed, I don't want to lie. We enjoyed [the course]. (Participant 3)

Knowles (1984) further argued that if the knowledge gained is relevant, adult learners are more likely to apply those skills in the workplace and in their personal lives. The findings of the study agree with this argument, because all the participants indicated that they have applied the knowledge gained both in their work and their personal lives. They mentioned that they used these skills in ordering cleaning stock, managing the employee leave system and cell phone banking, and improving typing.

Another concept of andragogy is adult learner experience. Both Knowles (1984) and Jarvis (2004) argue that adult learners use their accumulated experiences in learning new knowledge. The study indicated that the participants' prior experience did provide the basis for their learning: they knew they needed computer skills, from their experience; they knew their children were rapidly learning computer skills, again from their experience. They also used their experience to focus and identify other opportunities where the skills could be used in their personal lives.

According to Knowles (1984), the concept of readiness to learn means that adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life. Jarvis (2004) further argued that adults want to learn in the problem areas with which they are confronted and which they regard as relevant. The findings of the study indicate that participants took the initiative to enrol without the help of others. This indicates that participants were interested in INCT and saw the relevance of the programme in their lives. Although it was established during the interviews whether they would have taken the trouble of finding a computer course if the department had not provided one for them, I strongly believe that the motivation and eagerness to learn computer skills would have eventually driven them to source training on their own. Although three of the participants were cleaners, and their daily tasks did not require computer skills, they were still able to diagnose their learning needs and set goals which were both occupational and personal.

The concept of andragogy as an orientation to learning, as argued by both Knowles (1984) and Jarvis (2004), relates to adults being problem centred. Kearsley (2010) further argued that learning should be linked to genuine problems and issues in people's lives. The result of this study agrees with this line of argument. The participants were confronted with genuine problems of being unable to use computers and two of them were required to supervise staff. This shows that some had genuine problems in their professional lives, while others had problems which related to personal challenges.

The last concept of andragogy is motivation to learn. As a person matures, it is posited that the motivation to learn is increasingly internal (Knowles, 1984). The study produced results that corroborate this concept, because participants confirmed that their motivation was more internal than external. They were motivated by the need to belong, by a sense of accomplishment and the need to remain relevant in the workplace. As the participants in this study are between 30 and 50 years of age, they can be categorised as mature. This maturing can be recognised in Participant 3, who, even though her daily tasks did not require computer skills, sought opportunities to apply those skills in the computer room where she is a cleaner.

5.3.2 Maslow's hierarchy of needs

In this section, I draw from Abraham Maslow's hierarchy of needs theory to explain learners' perceptions of the INCT learning area. Maslow's theory suggests that individuals must address low level needs before satisfying high level needs. Maslow argued that there are different kinds of needs, some 'deficiency' and some 'growth' needs. I discuss the different needs Maslow identified, and how these relate to the data.

Physiological needs include needs for shelter, food, and clothing. Maslow suggested that when these are not met, they take precedence over all other needs. In this study, I assumed that the physiological needs were already taken care of as none of the participants indicated that any of the physiological needs were a priority. However, from this study some participants joined the classes with the hope of career advancement. I interpreted this advancement as having the potential to improve their earnings, thus helping them to better meet their basic physiological needs:

We were promised that if we did these lessons, they would look for opportunities for us to move into better positions. (Participant 4)

Safety relates to both physical and economic security. Findings from the study confirms the need for safety. The results from those interviewed suggest that ICT skills were probably an

inherent requirement for those who are supervisors, since they already had computers in their offices. The other participants were not compelled to acquire these skills to increase job security. Therefore, these requirements are related to job stability.

Love and belonging are the third level and includes social and interpersonal needs. Maslow argued that human beings are inherently social creatures and desire to be part of intimate relationships. The study revealed that participants enrolled in the programme to avoid being left behind by family members, especially their children, and by colleagues, being perceived as lacking modern skills. For example, Participant 1 said “Yeah, there were areas where we were being left out. We work with people, we're supervisors. But with the computer, we were unable to use it”. In one of the responses by a participant, a cleaner like the others but younger, he indicated that he joined classes even though he already had computer. It is my conclusion that he may have felt left out and wanted to belong to the group of other cleaners who were attending classes.

Using Maslow's hierarchy deductively, some things become evident that are not apparent in the inductive analysis. For example, in the case of Participant 4 it became clear that his motivation is supported by what Maslow terms “love and belongingness”. He had previous knowledge of computers and yet he attended the full class and wrote the final examination. When the opportunity to attend INCT classes arose, he joined not because he felt there would be any improvement in his personal life or work performance, but because of the desire to be like others with certain skills, in particular INCT. This did not emerge in my inductive analysis, but Maslow's theory provides this insight.

Self-esteem is about self-confidence, self-respect, and recognition from others as a critical need at this level. The findings of the study show that participants had the desire for promotion prospects and advancing their careers. This can be linked closely to self-esteem needs, as advancing careers and gaining recognition boosts the participants' respect amongst their peers and even their family members. The data shows far more relevance for some in how their children viewed them. They were really worried about what their children might think of them, and felt much better after completing the course:

For me, there were things I didn't know, even things such as the names for the computer – knowing what such and such is. But after that I can tell you confidently everything. So that, how can I put this, makes my children know that there's something dad has knowledge of. (Participant 1)

And this exchange illustrates the same concerns:

Participant 1: ...we have a problem, we seem like dads that know nothing, and today's children have a lot of knowledge there and there, so now we get left behind.

Researcher: So, it boosted your confidence?

Participant 2: Yes.

Participant 1: Too much."

"...even at home we are able to buy the kids laptops... and be able to tell them how to use certain things" (Participant 2).

"You get encouraged whenever the child asks you" (Participant 2)

The participants show much higher levels of self-esteem in general in what they related:

But I got happy when I got to SARS and everything was easy, I was very prepared, and I did everything myself. (Participant 2).

As the other participant has mentioned, certain things we'd ask other people to do, but now we're able to do these things, which shows that we do have the knowledge and the understanding and do it on your own. (Participant 1)

Using this lens, I found that the participants self-esteem was boosted even though it was not the motivating factor for them to join the course.

Self-actualization represents that one has reached full potential. The results of the study show that participants were working towards personal growth, and they demonstrate the desire to improve their competency and capabilities. Self-actualization can take many forms, depending on the individual. These variations may include the quest for knowledge, understanding, peace, self-fulfilment, sacrifice, determination, and positivity, seeing challenges as opportunities (Maslow, 1971).

Maslow's hierarchy of needs has been criticised for reasons discussed in Chapter 2. Based on the study findings, I concur with Biney (2017), who critiqued Maslow, arguing that needs are not categorised in a hierarchical order in many African societies and that people do not

necessarily satisfy lower-level needs for the purpose of moving to higher-level needs. The results of the study show that despite the low level of their employment, and that the participants may still aspire to fulfil low level needs, they can simultaneously aspire to fulfil self-actualisation needs without following a particular sequence as proposed by Maslow.

5.4 Conclusion

This chapter presented a few themes derived from the inductive and deductive analysis from the theoretical framework. The literature review and conceptual framework were used as a basis for identifying the themes and discussing the findings. The next chapter focuses on summarising the findings and explaining whether the research questions were indeed answered by the study.

Chapter 6: Conclusion

6.1 Introduction

In this final chapter, I draw the study to a conclusion. The rationale of the study was to explore the perception of learners about the efficacy of the INCT learning area. The chapter presents a summary of the findings and attempts to answer the research questions.

6.2 Summary of the findings

This section presents the summary of my findings as related to each research question.

RQ1: What are learners' views regarding the value of skills learnt in INCT4 in their daily lives?

As discussed in detail in Chapter 5, the learners viewed the skills learnt in INCT 4 as valuable. The value they place is evident in their work lives and beyond work, in their daily lives. The computer skills were valuable in improving their work performance. Two participants indicated that they were now able to do tasks that they could not do before attending the classes. Their self-esteem was improved amongst their families, especially their children, and amongst work colleagues. One participant even compared learning computers to learning how to drive a car, as he could relate the application of both skills to improving performance.

RQ2: To what extent did learners apply skills gained on the INCT4 in their workplaces?

The learners interviewed outlined that over and above passing or progressing in their studies, they have managed to utilise the skills gained in their workplaces in different ways. They gained the ability to manage their work effectively and improve their typing skills and overall knowledge of computers. Two of the participants were able to apply the learnt skills at work and in their personal lives. Another two participants, although they did not get the opportunity to use the skills in the workplace (because as cleaners, the skill is not a requirement for their daily tasks), they were able to use the skills in their personal lives.

RQ3: How do the INCT4-related skills improve the learners' effectiveness in the workplace?

The INCT4-related skills improved the learners' effectiveness at the workplace in various forms. The learning programme is NQF-aligned and therefore participants can gain

occupational recognition from achieving credits against the formal qualification. This means the course allows for further study towards a formal qualification, as part of lifelong learning. The confidence and self-esteem that the course gave all the participants suggest that they may be more likely to study further. However, a significant difference was noted between the supervisors and the ordinary cleaning staff. The supervisors could make significant use of the skills, whereas the other staff could not. One participant cited the lack of access to computers as a hinderance.

As life-wide learning, participants can improve their broader social life, for example, by being able to operate e-platforms (cell phone banking and SARS e-filing) independently. Attending the INCT classes helped them to make decisions to remain relevant in the community and at the workplace. It helped some of them to perform harder and effectively deliver at the workplace. For one participant, it even gave her the confidence to purchase a laptop for her own personal use at home.

6.3 Reflections on the findings

The findings have showcased that adult education is lifelong learning and life-wide learning built on choices individuals make by an awareness of their scenario and holistic needs. This shapes the choices they made to either further their studies or not and remain relevant at the workplace and in the community and family.

The literature reviewed indicated that intentional and purposeful selection of learning programmes such as the INCT can lead to improvement in both work and personal life. Even though ICT innovations have transformed society ways that have totally changed the way people think, work and live, it is identified as one of the fundamental human needs that must be satisfied. The conceptual framework confirmed that adult learners are self-directed and make decisions to join adult classes due to different needs as outlined in Maslow's hierarchy of needs.

6.4 Reflections on the research process

In undertaking this study, I was helped by a few factors: the availability of literature reviewed from global, regional, national, and provincial perspectives; the willingness of participants to be interviewed; and the commitment of my supervisors to respond and provide feedback within the scope and time, which assisted the study to remain on track. I also found that the methodology chosen to conduct the research was appropriate, although the unavailability of

some of the participants, as well as limited time to participate, resulted in my being able to conduct only one interview with each participant, and due to these time limitations, I could not return to the participants for further investigation. I acknowledge that I should have rethought the case study design after I changed jobs, and I learned how there is always the need to rethink research-as-planned because things always change as you conduct the research.

As a practitioner in the adult education and training sector, the study assisted to confirm my understanding that the learning area INCT4 did boost the confidence and self-esteem of adult learners. Having implemented the course for more than ten years, although the demand for participation was increasing every year, and the pass rate was significantly higher when compared to other learning areas, we did not at the time have any empirical evidence; but we knew that learners found this course valuable. However, the unavailability of literature that related directly to efficacy of NQF Level 1 learning areas indicated that there is indeed a need for more research to understand if the adult education policies and programmes are addressing learner needs or not.

6.5 Possible areas for future research

Knowles's theory of andragogy says that adults need to be involved in the planning and evaluation of their instruction. Therefore, future research should focus on assessing how adult learners are (and can be) involved in the planning and implementation of learning programmes that address their needs, as set out in Maslow's hierarchy of needs, particularly in South Africa. Such studies would also shed light on the value that adult learners place on any learning programme. Knowles also advocates for adult learning that addresses broader needs of adults. I therefore advocate that more studies on the usefulness of other learning areas in CLCs would shed light on whether adult education does address the broader needs of adult learners.

6.6 Conclusion

The findings of this study suggest that adult learners make decisions about joining learning programmes to address their specific needs, and the value they place on the learning area depends on whether their needs are met. Adult learners valued the learning even though it might not have addressed those specific needs, because it helped in their lives more broadly, and built their self-confidence.

This study sheds light on the usefulness of learning areas, especially the occupational learning areas such as INCT, that provide learners with practical and usable skills that can address their immediate needs, in the family and in the workplace, as well as address occupational needs for future job stability and self-esteem. In a changing world, whilst fundamental needs might not change, the skills needed to address them do. Therefore, the efficacy of occupational learning areas, from the perspective of the learners, needs to be constantly assessed.

Times today have changed, you now need to have knowledge about these computers, and where you are headed. (Participant 2)

References

- Aitchison, J. (2003). Struggle and Compromise: a history of South African adult education from 1960 to 2001. *Journal of Education*, 29, 125- 178
- Aitchison, J., & Alidou, H. (2009). *The state and development of adult learning and education in Sub-Saharan Africa*. UNESCO Institute for Lifelong Learning.
- Amin, A., Saeed, R., & Lodhi, M. R. N. (2013). The impact of employees training on the job performance in education sector of Pakistan. *Middle East Journal of Scientific Research*, 17(9), 1273-1278.
- Asongu, S. A., Odhiambo, N. M., & Rahman, M. (2023). Information technology, inequality, and adult literacy in developing countries. *Journal of the Knowledge Economy* <https://doi.org/10.1007/s13132-023-01307-8>
- Bangura, S. (2017). Effect of training and development on employee performance at an academic advising centre in Durban. *Educator Multidisciplinary Journal*, 1(1), 30-46.
- Benavot, A., Hoppers, C. O., Lockhart, A. S., & Hinzen, H. (2022). Reimagining adult education and lifelong learning for all: Historical and critical perspectives. *International Review of Education* 68, 165–194
- Bezuidenhout, M., Rudolph, E. C., & Furtak, A. M. (2019). Self-perceived employability attributes of adult learners within an open distance learning environment. *Journal of Contemporary Management*, 16, 106-139.
- Biney, I. (2017). Exploring Maslow's hierarchy of needs in the context of adult learners: Challenges and strategies. *Tertiary Education Series*, 8(2), 1-20.
- Bothma, R. (2018, April 2018). Technology can improve employee engagement. *HR Future*, <https://hdl.handle.net/10520/EJC-dca942e98>
- Brookfield, S. (2003). Racializing the discourse of adult education. *Harvard Educational Review*, 73(4), 497-523.
- Chetty, P. (2016, September 11). *Limitations and weaknesses of qualitative research methods*. Retrieved from Project Guru: <https://www.projectguru.in/limitations-qualitative-research/>

- Chetty, R. (2015). Freirean principles and critical literacy to counter retrograde impulses in the Curriculum and Assessment Policy Statement. *Reading and Writing*, 6(1), 1-7.
<http://dx.doi.org/10.4102/rw.v6i1.71>
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Creswell, J., & Creswell, J. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design* (4th ed.). Sage Publications.
- Dana, J., Dawes, R., & Peterson, N. (2013). Belief in the unstructured interview: The persistence of an illusion. *Judgement and Decision Making*, 8(5), 512-520.
- Department of Higher Education and Training (DHET). (2013). *White Paper on Post School Education and Training*. Department of Higher Education and Training.
- de Wet, W., & Koekemoer, E. (2016). The increased use of information and communication technology (ICT) among employees: Implications for work-life interaction. *South African Journal of Economic and Management Sciences*, 19(2), 264-281.
<https://doi.org/10.4102/sajems.v19i2.1328>
- de Wet, W., Koekemoer, E., & Nel, J. A. (2016). Exploring the impact of information and communication technology on employees' work and personal lives. *South African Journal of Industrial Psychology*, 42(1), 11 pages.
<http://dx.doi.org/10.4102/sajip.v42i1.1330>
- Elias, J., & Merriam, S. (2005). *Philosophical foundations of adult education*. Krieger.
- Engel-Hill, P., Garraway, J., Jacobs, C., Volbrecht, R., & Winberg, C. (2010). Working for a degree: Work-integrated learning in the higher education qualifications framework. In Townsend, R. (Ed.). *Universities of technology: Deepening the debate (Kagisano No.7)* (pp. 62-88). Council for Higher Education.
- Flick, U. (2009). *An introduction to qualitative research* (4th ed.). Sage.
- Freitas, F., & Leonard, L. (2011). Maslow's hierarchy of needs and student academic success. *Teaching and Learning in Nursing*, 6(1), 9-13.

- Gotta, C. A. R. (2019). What's in it for me? Barriers to participation in adult learning in small communities of western Canada. *Journal of Vocational, Adult and Continuing Education and Training*, 2(1), 43-53.
- Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, 29(2), 75-91.
- Gustavsson, B. (1997). Lifelong learning reconsidered. In S. Walters (Ed.), *Globalisation, adult education and training: Impacts and Issues* (pp. 237-249). Zed Books.
- Heyns, J. P. (2004). *The current international and national practices in implementing Recognition of Prior Learning (RPL) and mechanisms that will ensure that RPL is a credible and valid process for awarding credits in terms of formal unit standards and qualifications registered on the South African National Qualifications Framework*. [Unpublished Masters' thesis]. University of Pretoria.
- Holmes, A. G. D. (2020). Researcher positionality: A consideration of its influence and place in qualitative research - A new researcher guide. *Shanlax International Journal of Education*, 8(4), 1-10.
- Indabawa, S., & Mpofu, S. (2006). *The social context of adult learning in Africa*. Pearson Education.
- Jackson, N. J. (2012). Lifewide learning: History of an idea. In N. J. Jackson & B. Cooper (Eds.), *Lifewide Learning, Education & Personal Development e-book*, 1-30.
- Jarvis, P. (2004). *Adult education and lifelong learning: Theory and practice*. Routledge.
- Jarvis, P. (2007). *Globalization, lifelong learning and the learning society: Sociological perspectives*. Routledge
- Kakilla, C. (2021, June 21). *Strengths and weaknesses of semi-structured interviews in qualitative research: A critical essay*. Preprints. Retrieved June 07, 2022, from <https://doi.org/10.20944/preprints202106.0491.v1>
- Kaplan, M., Sanchez, M., Hoffman, J. (2017). *Intergenerational Pathways to a Sustainable Society*. Springer.
- Kearsley, G. (2010). Andragogy (M. Knowles). The theory into practice database. Retrieved from <http://tip.psychology.org>

- Kenrick, D., Griskevicius, V., Neuberg, S., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5(3), 292-314.
- Kirkpatrick, D., & Kirkpatrick, J. D. (2005). *Transferring learning to behaviour using the four levels to improve performance*. Berrett-Koehler Publishing.
- Knapper, C., & Cropley, A. (2000). *Lifelong learning in higher education*. Kogan Page.
- Knowles, M. (1984). *Self-directed learning: A guide for learners and teachers*. Follett Publishing.
- KwaZulu-Natal Provincial Government. (2012a). *Provincial growth and development strategy*. KwaZulu-Natal Office of the Premier.
- KwaZulu-Natal Provincial Government. (2012b). *Provincial policy framework on implementation of adult education and training programmes in the workplace*. KwaZulu-Natal Office of the Premier
- Longworth, N. (2003). *Lifelong learning in action: Transforming education for the 21st century*. Taylor and Francis.
- Mack, L. (2010). The philosophical underpinnings of educational research. *Polyglossia*, 19, 5-11.
- Maslow, A. (1971). *Self-actualization*. Big Sur Recordings.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, 2001(89), 3-14.
- Merriam, S. B. (2004). The changing landscape of adult learning theory. *Review of Adult Learning and Literacy: Connecting Research, Policy, and Practice*, 4, 199-220.
- Mozael, B. (2015). Impact of training and development programs on employee performance. *International Journal of Scientific and Research Publications*, 5(11), 37-42.
- Nafukho, F., Amutabi, M., & Otunga, R. (2005). *Foundations of adult education in Africa*. Pearson Education.
- National Literacy Trust. (2021). *New research shows the value of supporting pre-school language skills: It could boost the economy by €1.2bn*. [Online] Accessed 2024
<https://literacytrust.org.uk/news/>

- Nassazi, A. (2013). Effects of training on employee performance: Evidence from Uganda [Unpublished thesis]. Vaasan Ammattikorkeakoulu University of Applied Sciences.
- Noltemeyer, A., James, A., Bush, K., Bergen, D., Barrios, V., & Patton, J. (2021). The relationship between deficiency needs and growth needs: The continuing investigation of Maslow's theory. *Child and Youth Services*, 42(2), 24-42.
- Pearson, E., & Podeschi, R. (1999). Humanism and individualism: Maslow and his critics. *Adult Education Quarterly*, 50(1), 41-55.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. Sage.
- Reder, S. (2020). A lifelong and life-wide framework for adult literacy education. *Adult Literacy Education*, 2(1), 48-53.
- Reischmann, J. (2014). Lifelong and lifewide learning - A perspective. In S. Charungkaittikul (Ed.), *Lifelong education and lifelong learning in Thailand* (pp. 286-309). Mahidol University.
- Reynolds, G. (2015). *Information technology for managers* (2nd ed.). Cengage Learning.
- Rule, P., & John, V. (2011). *Your guide to case study research*. van Schaik.
- Schugurensky, D. (2000). *The forms of informal learning: Towards a conceptualization of the field*. WALL Working Paper No.19, 2000. Centre for the Study of Education and Work, Department of Sociology and Equity Studies in Education, Ontario Institute for Studies in Education of the University of Toronto.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive and critical research paradigms. *English Language Teaching*, 5(9), 9-16.
- Shi, Y., & Lin, X. (2021). A test of Maslow's Hierarchy of Needs concept by a correlational model among adult learners. *American Association for Adult and Continuing Education*. 229-234
- Smith, M. K. (1999). Learning theory. The encyclopaedia of informal education. Retrieved on 26 October 2023 from www.infed.org/biblio/b-learn.htm

- South Africa. (1996). *Constitution of the Republic of South Africa, Act 108 of 1996*. Government Printer.
- Stahl, N., & King, J. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26-28.
- Sultana, R. (2012). Learning career management skills in Europe. *Journal of Education and work*, 25(2), 225-248.
- TEAL Center staff. (2011). *Adult Learning theories: TEAL Center Fact Sheet No. 11*. Teaching Excellence in Adult Literacy.
- Tharenou, P., Saks, A., & Moore, C. (2007). . A review and critique of research on training and organizational-level outcomes. *Human Resource Management Review*, 17(3), 251-273.
- Tshilongamulenzhe, M., Coetzee, M., & Masenge, C. (2013). Development of the learning programme management and evaluation scale for the South African skills development context. *South African Journal of Industrial Psychology*, 39(1), 1-14.
- Turban, E., & Volonino, L. (2010). *Information technology for management: Transforming organization in the digital economy*. Wiley.
- UNESCO. (1997). *ISCED, International standard classification of education 1997*, Retrieved in 2020, from UNESCO: www.uis.unesco.org/Library/Documents/isc97-en.pdf.
- UNESCO (2015). *Towards an operational definition of lifelong learning*. UIL Working Papers No. 1. Institute for Lifelong Learning
- UNESCO. (2016). *3rd Global Report on Adult Learning and Education III*. Retrieved 2020, from UNESCO: <http://uil.unesco.org/system/files/grale-3.pdf>
- UNESCO. (2019). *4th Global Report on Adult Learning and Education*. Institute of Lifelong Learning.
- UNICEF (United Nations Children's Fund) (2022). The State of Global Learning Poverty 2022 Update. [Online] Retrieved 2024 from: <https://www.unicef.org/reports/state-global-learning-poverty-2022>.

- Vears, D., & Gillam, L. (2022). Inductive content analysis: A guide for beginning qualitative researchers. *Focus on Health Professional Education*, 23(1), 111-127.
- Walters, S. (2006). Adult learning within lifelong learning: A different lens, a different light. *Journal of Education*, 39, 7–25.
- World Bank Group. (2018). *Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints, and opportunities*. World Bank.
<https://doi.org/10.1596/29614>
- Wright, P. & Geroy, D. G. 2001. Changing the mindset: The training myth and the need for word-class performance. *International Journal of Human Resource Management* 12(4), 586–600.
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325.
- Yin, R. (2003). Designing case studies. *Qualitative Research Methods*, 5(14), 359-386.
- Yurdakul, G., & Arar, T. (2023). Revisiting Maslow’s Hierarchy of Needs: Is it still universal content? *Journal of Human Behavior in the Social Environment*, 33(8), 1103-1130.
<https://doi.org/10.1080/10911359.2023.2177227>
- Ziegler, S., & Sussman, S. B. (1996). *The effectiveness of adult literacy education: A review of issues and literature related to outcome-based evaluation of literacy programs*. Ontario Literacy Coalition.

Appendix 1: Informed consent

UNIVERSITY OF KWAZULU-NATAL

School of Education

Dear Participant,

I am a master's student at the School of Education of the University of KwaZulu-Natal. You are invited to participate in the research study entitled: **Exploration of the learners' views on the efficacy of Information Communication Technology 4 in improving work performance: The case of KwaZulu-Natal Department of Health employees in Durban.**

The purpose of this study is to explore the effectiveness of INCT4 in the daily lives of the learners who are employed by the KwaZulu-Natal Department of Health and are registered at a CLC in Durban. Further, to establish the extent to which INCT4 skills contribute towards improving their performance in the workplace.

Through your participation in this study, the research aims to understand how your participation in the INCT 4 learning area benefited you in both your personal life and work performance.

Your participation in this study is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Education, UKZN.

If you have any questions or concerns about completing this interview or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The interview should take about 20-25 minutes of your time. I hope you will take the time to complete it.

Sincerely

Investigator's signature _____

Date _____

CONSENT

I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT DATE

.....

Appendix 2: Interview schedule for learners

My name is Lungiswa Malinga, I am a student at UKZN studying for a Master of Education Degree specializing in Adult Education. I would like to ask you a few questions about my research entitled: *Exploration of the learners' views on the efficacy of Information Communication Technology in improving work performance: The case of KwaZulu-Natal Department of Health employees registered at a Community Learning Centre in Durban.*

The aim of this study is to find out what are your views about how INCT has improved both your personal lives and improved your effectiveness in the workplace.

I am going to ask you questions about your personal views, how you have applied the skills you learnt in INCT in the workplace and how INCT has improved your effectiveness. This information is going to help with planning and development of the learning area to cater for the needs of adult learners.

The interview will take about 20 minutes.

Let me begin by asking how long ago did you study INCT, and whether you completed your GETC, or you only did the INCT?

1. Learners' views

- 1.1 Why did you decide to enrol onto this learning area?
- 1.2 Before you joined the class, did you have any computer skills or access to a computer?
- 1.3 Initially, did you understand what kind of skills or knowledge you were going to get from this learning area?
- 1.4 Now that you completed this learning area, did it meet your expectations?
- 1.5 How has this learning area improved your personal life?

2. Application of skills in the workplace

- 2.1 Do you have access to a computer at work?
- 2.2 Does any of your duties require that you use a computer?
- 2.3 How many times do you use the computer to complete your daily tasks?
- 2.4 Tell me about two ways in which you are using the computer skills at home or in your personal life.

3. Improved effectiveness

3.1 Have your responsibilities at work changed since you have computer skills?

3.2 How has learning INCT improved the way you do your work?

3.3 Tell me about two ways in which you are using the computer skills at work.

3.4 Are you willing to learn more or be given more duties because of the skills you have acquired?

In conclusion, this interview included discussion about how you think INCT has improved your life and workplace effectiveness.

Is there something else would you like to tell me about this learning area?