

**AN INVESTIGATION INTO TEACHERS' GENDER PERCEPTIONS
AND THEIR INFLUENCE ON FEMALE LEARNERS' E-LEARNING
PROFICIENCY**

**THESIS SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION**

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BY

ROSE KHANYISA MASHA

SUPERVISOR: DR. THERZA PALM-FORSTER

CO-SUPERVISOR: PROF. NTOMBOZUKO DUKU

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DECLARATION

I, Rose Masha, hereby declare that this study is my original work and has not been previously submitted to any other institution. All secondary sources that have been used in this study have been acknowledged.

Signature:

Date:

DEDICATION

I dedicate this work to four phenomenal women from whose strength I have drawn throughout my life: my mum, (Gladys), my sisters Zama and Zim, and my very good friend, Rose Richards.

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Firstly, I would like to acknowledge the Almighty for His constant presence in my life. I would also like to thank SASOL INZALO for offering me a chance to be one of their PhD Fellows. Support, particularly from Noreen, Cynthia and Irene, is beyond anything I could imagine, and I am grateful to them for allowing me a chance to give a voice to the female learners in the six schools in this study.

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ABSTRACT

The purpose of this study was to determine whether gender perceptions of teachers do have a negative impact on e-learning of female learners in rural and semi-rural schools. A narrative enquiry was used to examine existing gender perceptions of six (6) teachers and 119 male and female learners in both rural and semi-rural schools in East London, King William's town and Butterworth districts in the Eastern Cape Province in order to discern their values and ideologies that could affect female learners negatively in their e-learning endeavours. Using critical theory of pedagogy, feminism, and constructivism as a theoretical frameworks, this study argues that that e-learning for females, in particular, girls in rural and semi-rural areas, is tied to their socio-economic well-being and gender perceptions. The study applied the sequential mixed methods approach of qualitative narrative inquiry (interviews) and quantitative research (questionnaires). The findings in this study indicated that the teachers' gender perceptions do influence the proficiency of female learners in e-learning classes. Additional factors such as the schools' pedagogical concerns and culturally engineered gender stereotypes due to unconditional acceptance of Xhosa rituals such as forced marriages, polygamy, finger-cutting and labial stretching, as a norm, were also found to negatively affect e-learning proficiency of female learners. However, it is also evident that the teachers' gender perceptions are not the only factors that influence e-learning proficiency in female learners. The patriarchal societies' gender constructions, through socialization by the society and communities surrounding the schools, have an added influence on the female learners' low success rate in e-learning. Moreover, lack of support from the Department of Basic Education in e-learning was found to be a contributing factor towards the teachers' apathy, which influences their perceptions towards e-learning. Finally, this study discovered that there seems to be evident policy gaps between the Constitution, the Department of Education and the Traditional Leadership. The afore-mentioned fraternities seem to influence the schools in rural and semi-rural areas in the Eastern Cape to lean towards patriarchal authority and dictatorship, rather than towards transparent and fair governance for female learners in traditionally male-oriented subjects such as technology.

LIST OF ACRONYMS

BPFA: Beijing Platform for Action

CAI: Computer Assisted Instruction

CAT: Computer Application Technology

CEDAW: Convention on the Elimination of all Forms of Discrimination against

CGE: Commission for Gender Equality

DBE: Department of Basic Education

DI: Direct Instruction

ECDoE: Eastern Cape Department of Education

EMGD: Education Management and Governance Development

FDET: Former Department of Education and Training FDET

FET: Further Education & Training

GET: General Education and Training

GETT: Gender Equity Task Team

GFP: Gender Focal Person

ICT: Information and Communication Technology

ISAD: Information Society and Development

IT: Information Technology

LA: Learning Area

LO: Life Orientation

NAPTOSA: National Association of Professional Teachers Organisation in South Africa

NCET: National Council for Educational Technology

NCS: National Curriculum Statement

NGO: Non-Governmental Organisation

OSW: Office of the Status of Women

PC: Personal Computer

RNCS: Revised National Curriculum Statement

SADTU: South African Democratic Teachers Union

SASA: South African Schools Act of 1996

SGB: School Governing Body

SITES: Second Information Technology in Education Study

SMT: School Management Teams

UK: United Kingdom

UNESCO: United Nations Educational, Scientific and Cultural Organization

ZPD: Zone of Proximal Development

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CHAPTER 1: BACKGROUND TO THE STUDY

1.1 Introduction

Providing opportunities for female secondary school learners to develop technology skills is paramount in the 21st century. According to Mayisela (2010), this will ensure future-ready female learners who will be successful at tertiary institutions and in their careers. In the light of this importance of technology to education, this study investigated the gender perceptions of teachers and how they influence e-learning proficiency of female learners in six rural and semi-rural Eastern Cape schools.

1.2. Background to the study

According to Luskin (2010), e-learning is the use of electronic educational technology in learning and teaching, and this is the definition within which e-learning is referred to in this study. Huyer and Sikoska (2003) make a statement e-learning is different from basic computer skills in that the latter only concentrates on proficiency with regards to operating a computer whilst the latter refers to use of computers and other forms of technology in order to acquire knowledge for use in other subjects, including use of the internet to enhance knowledge. Huyer and Sikoska (2003) further argue that technology is the most effective tool in the hands of females, enabling them to extend their participation in a variety of productive fields and providing them with an avenue to express the development of their personalities and capacities. Gurumurthy (2009), whose research is mostly on Arab females and technology, agrees with the point above by asserting that e-skills can enable females to participate effectively in numerous development fields, including planning and decision-making at the level of the family, schools, and society in order to play a pivotal role in their own and the country's development.

Ensuring gender-equal access to technology has, according to Cooper & Weaver (2007), become an essential core objective and an integral element in the many extensive research and development initiatives. This objective, at the global level, effectively improves females' lives by increasing their capacities to share and access information and knowledge. As a result, more and more females and female learners have begun to utilize technology through the initiatives that promote females' access

to and understanding of technology, according to Rainer, Laoethakul and Astone (2003).

In order to get a clearer global picture of the issue of e-learning and gender, which is the focus of this study, below is a discussion of various countries' research and intervention initiatives on e-learning and e-education. The reason for this interest is due to the global need to redress the historical imbalances that have occurred in many countries with regards to female learners being exposed to only traditional subjects such as cooking and needlework whilst male learners were exposed to subjects such as agriculture, technology and graphics throughout the world as per Ramsay's (2004) assertion. It is therefore important to give an overview of gender perceptions on e-learning in terms of the international, African, and South African contexts as is done below.

1.2.1 International perspectives of gender perceptions on e-learning

According to Wadell (2010), globally, e-learning has been adopted extensively, and in most schools, the uptake and success of e-learning depends on the attitude or perceptions that the teachers have towards using technology in their classrooms. According to Stotekamp and Kies (2007), most research conducted on teachers' and students' perceptions on technology for teaching and learning is done under the ambit of the Technology Acceptance Model (TAM). According to Wadell (2010), the Technology Acceptance Model (TAM) is a useful model when studying gendered technology because the core constructs of TAM are perceived usefulness and perceived ease of use of technology by different genders.

Wadell (2010) further explains that if teachers and learners perceive e-learning as useful, their confidence in technology can enable them to carry out different and important roles in their e-learning classroom. Gender seems to be the most influential background factor as it affects the level of computer anxiety, perceived usefulness and ease of use, according to Ong and Lai, (2006). Ong and Lai (2006) also claim that female learners generally experience more computer anxiety and a lower degree of perceived usefulness and perceived ease of use than males, but that the females' anxiety is mostly fuelled by how the society drives gender stereotypes with regards to technology use by females.

A direct relationship between gender and technology acceptance is also proposed by Mitra, Khoreva and Mishra (2010), who concluded that males were more positively predisposed toward computers and tended to use computers more than females because of societal encouragement for males to use them. Tolhurst (2004) (cited in Muhuro, 2009) also points out that in his study on e-learning in single gender schools the predominant factors influencing e-learning acceptance were epistemological beliefs of students, school culture, and gender.

According to Silverman (2006), critical theorists of technology criticize educational software that portrays males as the "movers and shakers" while portraying females as "second class" participants. Critical theorists of technology, according to Shor (2007) raise similar points, particularly concerning equity issues such cultural and gender biases in some educational software.

The UNESCO (2010) report highlights that the United Nations Education Scientific and Cultural Organization (UNESCO) spends more than two million dollars per year in research and development initiatives on promotion of female empowerment in technology. Such an expenditure, according to Editorial (2009), assists in addressing issues such as the continuing gaps in e-learning due to lack of access, domestic responsibilities, and socio-cultural practices that downplay the importance of providing computer technical skills to female learners. According to Raftree (2010), in Jamaica, where female learners reportedly perform worse than male learners in e-learning, female learners in this study reported that male learners hogged and monopolized computers and other technology equipment, and therefore access to computers was limited for female learners. One of the summaries of the afore-mentioned study was that, if female learners are assumed to be less intelligent or less worthy than male learners, and their secondary school attendance (where e-learning training might be offered) is not a priority, female learners will have a very difficult time ever accessing and using computers.

Ramsay (2004) reports that in the United States the choice of technology subjects and performance therein is still dominated by males. As a result, according to Ramsay (2004), some females in technology careers have pulled together to question the afore-mentioned male domination and to advocate for more

opportunities for females to break into the male-dominated world of technology through further support of female learners in the school curriculum.

In Arab countries, the female population of internet users is reported to be as low as 4%, and it is one of the lowest in the world in quantitative terms, according to Internet World Stats (2011). Females in the Gulf region in general and in Oman in particular are reported to be at a higher risk of being marginalized from today's knowledge-based economy. Such marginalization, asserts Gurumuthry (2009), is due to factual findings related to a traditionally male-dominated technology sector, unequal access to training, the lack of "Arabized" internet content and training, and the lack of awareness and policy advocacy. In the United Kingdom (UK), Wadell (2010) reported that female learners performed well in her computer classes only when there was a role model in the subject content that they could identify with.

The above assertion came after Wadell (2010) had given different classes of female learners a task to design *Lara Croft*, a popular female tomb-raiding character. In addition to looking at the e-learning and gender context at school, some research also looks at the issue in terms of female learners' career choices, that is, if they do venture into technology-related careers after high school or not. An example of such studies is Huyes (2006) publication that raises his concern over the decline of the subject Computer Applied Technology (CAT) registration numbers as a subject of choice by South African students. Chiles (2012) adds his concern to the fact that Information Technology (IT) practitioners in South Africa account for a mere 7% of the total workforce.

Another perspective that links e-learning to career choice is the statement from BCC NEWS (Jan, 2008) that asserts that lack of interest from female students to pursue technology-related careers in the UK is reflected by the fact that only 10% of computing undergraduates are female. According to Mayisela (2010), the shortage of e-skills in both South Africa and Europe is affecting the productivity and the competitiveness of large and small organizations across societies globally.

According to the National Training Organisation (NTO) report (2008), in order to address the e-skill gap between male learners and female learners, a European initiative of Computer Clubs was established in 2008. Such an initiative is aimed at

encouraging female learners' improved performance in technology - with learning done by incorporating music, film stars, and teen magazines.

The discussion below proceeds to continental gender perceptions on e-learning.

The above assertion came after Wadell (2010) had given different classes of female learners a task to design *Lara Croft*, a popular female tomb-raiding character. In addition to looking at the e-learning and gender context at school, some research also looks at the issue in terms of female learners' career choices, that is, if they do venture into technology-related careers after high school or not. An example of such studies is Chiles' (2012) publication that raises his concern over the decline of the subject Computer Applied Technology (CAT) registration numbers as a subject of choice by South African students. Chiles (2012) further links his concern to the fact that Information Technology (IT) practitioners in South Africa account for a mere 7% of the total workforce.

Another perspective that links e-learning to career choice is the statement from BCC NEWS (Jan, 2008) that asserts that lack of interest from female students to pursue technology-related careers in the UK is reflected by the fact that only 10% of computing undergraduates are female. According to Mayisela (2010), the shortage of e-skills in both South Africa and Europe is affecting the productivity and the competitiveness of large and small organizations across societies globally.

According to the National Training Organisation (NTO) report (2008), in order to address the e-skill gap between male learners and female learners, a European initiative of Computer Clubs was established in 2008. Such an initiative is aimed at encouraging female learners' improved performance in technology - with learning done by incorporating music, film stars, and teen magazines.

The discussion below proceeds to continental gender perceptions on e-learning.

1.2.2 African gender perceptions on e-learning

In keeping with this study's focus which is gender perceptions, various researchers such as Dlodlo (2010), Mlitwa (2009) and Wainana (2008) have reported findings on research regarding how technology, as an agent of socialization, plays a role in socializing individuals towards gender perceptions. Below is a discussion on such research findings.

Wainana (2008) reports that in Kenya, until the recent influence by the Technology Week for Female Learners' campaign championed by the United

Nations, most females were socialized into believing that computers were meant for males. Wainana (2008) explains that males generally received priority of use in internet cafés, especially in the Kisii and highlands areas of Kenya, and in most schools in Nairobi, only male teachers had the authority over computer laboratories in those schools which had computers. Wainana (2008), in her study of female learners' attitudes towards e-learning and educational computer games, found that when prompted, female learners do enjoy educational computer games but only as an additional hobby.

In the aforementioned study, female learners reported that in most games, females are portrayed to have unnaturally big breasts, very small waists, and are scripted to always need a male hero to save them. This damsel in distress portrayal is seen as disempowering by the female learners, and therefore led to them losing interest in e-learning lessons that included games (Wainana, 2008). Part of Wainana's (2008) recommendations were that e-learning educators need to source assistance of the *Girls' Tech Framework*, a website that pedagogically gives guidance on e-learning and gaming for gender inclusion.

According to Dlodlo (2010) one of the main factors that affects female learners' performance in e-learning is gender stereotyping that fuels the negative representation of females with respect to technology. Thus, the influence of the technology with regards to socialization of individuals especially within the gender context, is an issue that is and continues to intrigue researchers of technology in societies.

With regards to the influence of gender in technology, Dlodlo's (2010) study is a revelation of these perceptions. In the afore-mentioned study, female teachers reported an unwillingness to participate in e-learning instruction. Such training was prioritized for male colleagues, who, in turn, were expected to cascade it to female colleagues.

Dlodlo (2010) further reports that the cascaded training that teachers in her study received from their male peers was hurried and not informative enough for the female teachers to be skilled enough to teach using technology. According to Fiske and Ladd (2012), the cascade model has been widely criticised as an inadequate model for delivering effective training. When the intended message

is transmitted to the next level, the chances of crucial information being misinterpreted are high (Fiske and Ladd, 2012:162). The above-mentioned authors' argument concurs with the point above made by Dlodlo (2010).

This particular view of favouring male over female empowerment in technology is also evident in family settings as reported by Mlitwa's (2009) research below. Mlitwa (2009) reports that in Gauteng parents bought technology gadgets mostly for their male, rather than their female offspring. This gave the male learners an unfair advantage in the e-learning classroom since they were more computer literate than their female peers. Furthermore, computer knowledge head-start, on the part of male learners, seemed to encourage teachers to warm up to the male learners more than the female learners as the male learners were perceived by the teachers as bright, computer-savvy and initiative-taking (*ibid.*).

According to the United Nations (UN) e-education statement (as cited in UNESCO, 2010), research in many African countries shows a huge e-skills gap between female learners and male learners of school-going age. Following the UN statement mentioned above, a number of initiatives which mostly centred on dialogues around bridging this gap and celebrating small successes were introduced. To mention a few, at the 7th International Conference of Indigenous Females held in New Zealand in 2010, indigenous communicators from Kenya, Malawi and Zambia reported on the low level of access to technology for females mainly due to infrastructural shortcomings (CIW Proceedings, 2010).

In a similar presentation at the CIW Proceedings (2010), it was reported that in places where such infrastructure existed, socio-cultural dynamics dictated priority of access towards males and male learners. An example of the Kissii region in Kenya where males generally enjoy priority, according to Kissii culture, was cited. According to the afore-mentioned presentation, females are allowed access to a computer only when there is no male who wants to use the computer. This applies at home, in schools, and in internet cafes (CIW Proceedings, 2010). There has, however, been noted improvement in many African countries in addressing this discrepancy as per discussions that follow.

The first International Girls in ICT (Information and Communication Technologies) Day was marked on 26 April 2012, and at least five African countries participated. Some of these were Burundi, Botswana, Sudan, Angola, Liberia, South Africa, and others (ISOC-LIBERIA, 2012). Established through a formal resolution by the International Telecommunication Union (ITU) in 2010, this annual event aims to create a global environment that empowers female learners in gaining technology skills through e-learning at schools in order to pursue careers in the IT field. Following a study conducted by Guissé (2010) which showed that only 6% of the females and female learners in Senegal are skilled in technology, the Senegal Ministry of Education acknowledged the need for effective technology adoption that targets female learners and females in general.

According to Chiles (2012), in order to bridge the gender divide in Kenya where female learners have historically been out-performed by male learners in technology, the technology syllabus for female learners in some Nairobi schools has been entrepreneurially contextualized as from 2010. According to the aforementioned syllabus, the basic approach to introduction of female learners to technology in Kenyan schools is through the use of the *chama* concept.

Wainana (2008) explain that *chama* refers to a group of females who come together and contribute to a pool of money to help one another. Female learners are allocated a *chama* group to assist in creating a basic accounting file, and later, software to help that *chama*. Nwakanma (2012) supports the above approach asserting that such initiatives help to establish the necessary framework to ensure female learners' e-education. Thus, a gender gap in e-learning may not necessarily be a 'regional' issue, but rather one that is country-specific. This therefore brings this discussion to trends in South Africa. The discussion below proceeds to South African gender perceptions on e-learning.

1.2.3 South Africa gender perceptions on e-learning

Before delving into a discussion on the perceptions of e-learning in South Africa, it should be considered only fair to give a brief background of the educational system in the country. This should enable the reader to gain an understanding of the e-education landscape of South Africa and why it is in the position that it

is as against its international counterparts discussed above. Where there has been immense ground covered in e-learning research in other countries, South Africa has done its share, albeit minimal, through various projects such as The Wild Coast, Khanya, Walter Sisulu University, to mention a few. In addition, the South African Constitution (1996), which advocates equal access to education, has influenced the conception of the e-education White paper (DoE, 2004).

Such efforts are evident in various topics in the afore-mentioned document which allude to issues of access and success in order to redress past imbalances for disadvantages groups such as females (DoE, 2004). The White Paper on e-education (DoE, 2004) also states that in the South African context schools have to prioritize the use of technology in learning in order to accelerate the national education goal; the afore-mentioned document further states that by 2013 there should be computers in every school (DoE, 2004). The afore-mentioned statement refers to e-learning through the subjects Computer Applied Technology (CAT), Information Technology and e-learning throughout the curriculum as per the contextualized e-learning explanation contained in the background section of this study.

With all these strides acknowledged, it is vital to point out that South Africa has a history of contradictions which has its roots from the apartheid era hence ex-President Thabo Mbeki's reference to it as being "a land of two nations" in his Parliament opening speech (Mbeki, 2004). According to the Ministry of Education Report (2005), in order to address the legacy of a racially and culturally segregated system, the new democratic South Africa established a new legal and policy framework for education. This refers to the South African Constitution (1996) which provides for a unitary system of education, managed by the Department of Education and nine provincial departments. The Minister of Education, through the National Education Policy Act (1996), exercises power to determine the national norms and standards for education planning, provision, governance, monitoring and evaluation. Such national standards are reflected in the White paper on e-education (DoE, 2004).

Conradie and Roodt (2004), however, argue that there is a strong contrast between the ideals that have been put forward by the Department of Education

(DoE) policy makers in South Africa versus the realities and challenges faced by e-learning practitioners in rural and disadvantaged communities. Conradie and Roodt (2004) argue further that the issue that the White Paper on e-education fails to voice is how e-education should be implemented in a manner that is inclusive of those that are either female or disadvantaged.

The slow pace of the e-learning rollout in South African schools also adds to these concerns discussed above. Although the education authorities aimed to have computers in every school by 2013, by 2010 only 39.2% of schools and 15.9% of the country's population over 16 years of age had any access to a computer, and only half of that target was reached as per an article published in the Mail and Guardian (2013). An editorial article in the Daily Dispatch newspaper (2012:7) further reported that only 2% of the Eastern Cape population, where this study is based, has internet access. E-learning roll-out statistics are higher in the Western Cape, which is the leading province in e-learning implementation at 98% of its roll-out targets, followed by Gauteng at 95%. At the bottom is Limpopo at 44% and Eastern Cape at 51% (GCIS, 2012).

The above statistics point to the fact that e-learning is successfully implemented in other provinces such as the Western Cape and Gauteng whilst a huge gap exists in the Eastern Cape where this study is being carried out. Such a gap in technology proficiency exists between rural and urban schools, and between former model C schools and township schools as per the findings of a study conducted by Prince (2007) in the Makana region of the Eastern Cape.

In the few rural schools that do have computers in the Eastern Cape, such as the ones involved in the Walter Sisulu University (WSU) e-learning project (discussed in greater detail under *Motivations for conducting the study* section), reports are that female learners show far less computer skills proficiency than male learners. The afore-mentioned report is alarming, particularly in view of the fact that there are more female than male learners in South Africa as per the Human Science Research Council (HSRC, 2011) report on the gender parity index.

Since some of the schools in this study are in rural areas, a brief discussion of the connotations of the word *rural* needs to be made for better understanding of

the context of this study. This is necessitated by the different understanding of what people associate with the term rural. According to Barter (2005), how one defines rural can have an impact on research approach as well as research results. The definition of rural is quite elusive since the term is ambiguous.

Herzog and Pittman (cited in Barter, 2005) point out that not only have researchers historically not used a common quantitative definition of rural, but many also have criticized existing definitions for being based solely upon population density or size, and not upon other characteristics that are quintessentially rural. Some people understand the term rural in terms of the originality that it offers culturally, while for some it is a depiction of *backwardness*. A study conducted on rural education by the Ministerial Committee on Rural Education (MCRE) which was commissioned by the Department of Education defines rural in terms of its profile thus:

It should be noted that South Africa has diverse rural areas and therefore certain social, economic, educational and cultural factors need to be considered in enhancing the definition of rural education. The following features are examples of the rural profile:

- *distance to towns;*
- *topography (conditions of roads, bridges to schools);*
- *access to communications and information technology;*
- *transport infrastructure (roads, buses, taxis);*
- *access to services and facilities (electricity, water, sanitation);*
- *the health, educational and economic status of the community;*
- *access to life-long learning opportunities;*
- *social conditions in the community; and*
- *activities of political and civil society organisation. (Ministry of*

Education report, 2005:6)

All the above features pose a serious challenge to delivery of quality education in rural areas.

In view of the discussion of international and national trends above, it is clear that the issue of gender perspectives in technology is a universal problem which does not make this study's inquiry an isolated case. In the face of the project that has been mentioned in the discussions above, together with this study's significance, it is therefore important to ask questions that will provide answers to how the gender perceptions of teachers affect the proficiency of female learners in technology or e-learning. Such data should assist in recommending best practice that contributes positively to the national discourse on e-learning and the knowledge-base for females. Below is a discussion of the research problem.

1.3 The statement of the research problem

South Africa has made great strides through initiating the e-learning rollout to schools as per the White paper on e-education (DoE, 2004). In addition, initiatives on gender and technology done through community projects such as the ones mentioned in the *background* section above have put South Africa on the map as one of the countries that are making an effort towards development through technology. This being said, there are still problems in the system where e-learning and gender are concerned.

While research studies on e-learning show that there is a conscious move towards initiatives to bridge the e-learning gap that currently exists in favour of male learners internationally, female learners in rural and semi-rural schools are still lagging behind in computer skills proficiency. Research shows that as long as there exists negative gender perceptions from teachers, who are the main stakeholders in schools with regards to technology, female learners' proficiency in e-learning or technology-based learning may be negatively affected (Mitrovic, 2011).

The implication of the afore-mentioned problem, according to Jack (1997), is that female learners from rural and semi-rural schools lag behind in global knowledge participation and economic growth, which are long-term benefits of

e-learning. This study's focus is, therefore, on improving gender perceptions on e-learning so as to minimize gender disparities between male learners and female learners in e-learning proficiency in rural and semi-rural schools.

Having unpacked the research problem above, the research questions are presented below.

1.4 Research questions

- a) What are the e-learning teachers' gender perceptions?
- b) To what extent do the teachers' own gender perceptions influence proficiency of female learners in e-learning classes?
- c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

1.5 Research objectives

The objectives of this study were to establish:

- a) the e-learning teachers' gender perceptions;
- b) the extent to which teachers' own gender perceptions influence the e-learning proficiency of female learners;
- c) factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools;

1.6 Significance of the study

This study is significant because there is a dire need for the Eastern Cape Province's rural and semi-rural school female learners to acquire e-learning proficiency (Eastern Cape Provincial Government Report, 2010). Results from this study are therefore meant to provide useful information within the e-learning framework of individual e-learning aptitude to:

- a) Higher Education Institutions who plan to engage in technology community and school outreach projects. This will inform their community initiatives policies as torchbearers of learning and teaching from a gender-sensitive constructivist perspective;

b) the Provincial Department of Basic Education in order to put policies and intervention strategies in place. This could ensure that computers in schools promote computer skills that could be transferred across curricula for learners of different genders equally;

c) school computer donors (or in some cases, the School Governing Bodies) so that they are aware what affects either negatively or positively the intended objectives of their computer donations.

1.7. Motivation for the study

This study was motivated by the 2011 Walter Sisulu University (WSU) e-learning initiative whose findings were that out of ten (10) previously disadvantaged schools (located in rural, township, and informal settlements) who participated in the initiative, learners from six (6) of these schools did not improve in e-learning proficiency (Centre for Learning & Teaching Development Report, 2011). The above initiative was done in order to improve learners' e-learning skills through an interactive computer assisted e-learning module for grade 9 learners. Of interest to the researcher are the findings that the female learners in the study consistently showed much less improvement than male learners (see Appendix D). These findings therefore influenced the researcher to undertake this research in the six (6) affected schools with the purpose of identifying best practice within a similar context.

Findings from this study have provided a leeway on how to address the above issues legislatively and non-legislatively.

1.8 Literature review

A literature review is presented in Chapters 2 and 3 in this study in order to gain an overarching understanding of gender perspectives and how these perspectives could play a significant role in the educational success of female learners with particular reference to e-learning.

Chapter 2 presents literature on gender, patriarchy and socialization viewed from the lens of critical pedagogy and feminist theories. One of the focal points of this chapter is patriarchy as the overarching concept due to its influence

regarding the establishment of gendered societies. The second most important point of discussion in this chapter is socialization. Literature on socialization revealed gender as a socially constructed phenomenon. The afore-mentioned discussion explores ways in which various agents of socialization such as the home, religion, culture and language feed into gender perceptions and also looks into the possible link between gender perceptions and the failure of female learners to achieve their full potential in learning through technology.

Chapter 3 presents research conducted on various gender issues that affect schools and performance of female learners in schools. Most importantly, this chapter scrutinizes factors that affect e-learning proficiency of female learners. This is done through the lens of social constructivism theory and discourse from various research conducted on such factors is presented.

Below is a discussion of the research methodology adopted in this study.

1.9 Research methodology

The discussion below focuses on the components of research methodology which are the research sample, research approach, research paradigm, research design, data collection instruments, and data analysis used in this study.

1.9.1 Research sample

This study focuses on the six (6) secondary schools that participated in the Walter Sisulu University e-learning initiative mentioned above. One hundred and eighty (180) grade 9 learners and their six (6) grade 9 teachers who participated in the Walter Sisulu project mentioned above were targeted to be part of this study. However, when the researcher went to the schools to collect data in 2013, only one hundred and nineteen (119) learners participated. The reasons for the decline in student numbers were that some of the learners were absent on the days that the researcher went to the schools to collect data, some had dropped out of school since 2011, and some had not signed and submitted the mandatory consent forms for participation in this study.

Six (6) teachers, two (2) males and four (4) females, participated in the study. Three (3) teachers were from rural schools, and three (3) were from semi-rural schools (1 township and 2 informal settlements). In addition, one (1) government official from the District office in Zwelitsha participated as an interviewee in this study. The reason for interviewing only one government official was that of the two senior officials employed in the office of the Gender Focal Persons for the Eastern Cape Province, he was the only one who consented to an interview.

1.9.2 Research approaches

This research used sequential QUALI-quantitative mixed methods, as per Babbie (2013). Babbie (2013) explains that capitalizing the word “quali” is popularly used by the researchers to signify that the research is leaning more towards qualitative methods than quantitative methods.

The qualitative approach, according to Creswell (2009), is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. Creswell (2011) argues that the qualitative method investigates the *why* and *how* of decision-making, not just *what*, *where*, *when*. Creswell (2011) maintains the quantitative approach is scientific in its purpose as it tries to quantify the problem and understand how prevalent it is by looking for projectable results to a larger population.

1.9.3 Research paradigm

Since this is a mixed methods approach, this study is both interpretivist and positivist in nature. The interpretivist paradigm, according to Creswell (2011), is typically seen as an approach to qualitative research used when the goal of the researcher is to rely as much as possible on the participants' views of the situation being studied, while using open-ended questioning.

The positivist paradigm, on the other hand, addresses the quantitative method. Positivism is described by Mouton (2010) as a scientific stance that quantitative researchers take (posit) as a means of making a claim to its lack of ambiguity.

In addition, due to this study's focus being on emancipatory thinking, it adopted the critical paradigm of pedagogy. According to Kincheloe and McLaren (2002),

critical theory is concerned with the power and justice of several issues in society such as economy, race, gender, and education. The implications of the above description of critical theory of pedagogy are that this research was viewed through the emancipatory lens of the socioeconomically disadvantaged, rural and semi-rural female students for whom the development of e-learning skills may have been limited.

1.9.4 Research design: exploratory and descriptive designs

According to Leedy and Ormrod (2001), research design is the strategy, the plan, and the structure of conducting research which provides the overall framework of data collection. Selection of the research design for this study was informed by the research objectives of this study. A *descriptive* and *contextual* research design was used to explore and describe the perceptions of teachers and learners regarding how the teachers' perceptions affect the e-learning skills of female learners as guided by Polit and Beck (2006). The exploratory research definition used for this study is that of Polit and Beck (2006) which states that exploratory research is undertaken when a researcher plans to shed light on the various ways in which a phenomenon and its underlying processes are manifested. In this study, the researcher explored the gender perceptions of teachers and learners regarding how these had a potential to influence female learners' skills in e-learning. The descriptive design definition that is used for this study is by Polit and Beck (2006) which states that descriptive research is an innovative tool for researchers. It presents an opportunity to integrate both quantitative and qualitative data as a means to reconstruct the "what is" of a topic. In this study, the researcher described the gender perceptions of teachers and learners regarding how these could influence female learners' proficiency in e-learning.

1.9.5 Data collection methods: QUALI-quantitative research methods

This study, as mentioned before, used both the qualitative and quantitative methods of data gathering. These methods were used sequentially, with the qualitative methods taking precedence over the quantitative. According to Creswell (2011), there are advantages in using mixed methods in research as against using singular methods. The first advantage, according to Creswell

(2011), is that mixed methods research is versatile, and the range of data collection instruments it uses provides better understanding and explanation of results than using either qualitative or quantitative instruments on their own.

The researcher conducted unstructured (narrative) **interviews** with six (6) identified teachers and one (1) representative from the Department of Basic Education District office. The content of the interviews focused on gender-sensitive perceptions of technology and e-learning support practices that occur in rural and semi-rural schools. For learners, a **student questionnaire** which included closed-ended questions such as multiple choices, yes/no Likert-scale questions, and open-ended questions were also used to collect data. Questions asked from the students were an enquiry on their experiences in e-learning, gender perceptions on technology, socio-cultural perceptions around e-learning, actual access to e-learning labs, support from male learners in computer labs, support from teachers, and support from parents. Lastly, focus group interviews with all learners were used to triangulate data.

1.9.6 Data analysis

As mentioned previously, this study made sequential use of both quantitative and qualitative research tools to gather data. As a result of this mixed methods approach, the analysis of data was structured to respond to the unique qualities of each method, and that is the reason for each research approach to be discussed separately below as qualitative and quantitative data analysis.

1.9.6.1 Qualitative data analysis: narrative interviews

In the qualitative analysis of the study, following the collection of data from unstructured in-depth interviews with the teachers and the focus group interviews with the learners, data was transcribed and coded by the researcher.

According to Denscombe (2007), the analysis of research data follows a process that involves five stages. In the both the qualitative and quantitative data, the stages advanced by the above-mentioned author were adhered to and are summarised as:

- **stage 1: data preparation** – in this study, the researcher coded, categorized, and checked the data for correctness;

- **stage 2: initial exploration of the data** – following stage 1, the researcher looked for obvious trends or correlations in the data; the researcher also used an excel spread-sheet where the data was entered to undertake this task;
- **stage 3: grouping of the data** – the researcher coded and grouped codes into themes in order to compare themes; the researcher also developed categories of the themes in order for these to assist in the analysis and presentation of data, which is stage 4;
- **stage 4: presentation and display of data** – following the analysis of data, themes were interpreted and written up; the qualitative data was written up as a narrative, and the quantitative data was written up using pie charts, bar charts, and tables to complement the report;
- **stage 5: validation of external data** – methodological triangulation was used to validate the data.

1.9.6.2 Quantitative data analysis: questionnaires

In the quantitative analysis of this study, the researcher coded the learners from 01 to 0119 and entered these codes onto an SPSS matrix. This was particularly done for the questionnaire responses in order to ensure a research trail, as per Denzin and Lincoln's (2010) advice. The questionnaire had 42 questions and was divided into sections in order to elicit responses that would answer the research questions and meet the research objectives.

The learners indicated their responses in the questionnaire through Multiple Choice Question sheets so that their responses could be captured quickly and accurately using a combination of yes/no and 5-point Likert scales that gave the respondents a choice of five response options: *1-Strongly Agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree*. In addition, the questionnaires had open-ended follow up questions which were meant to clarify learners' responses.

In this study, Guba's (2001) guidelines of quantitative data analysis were adhered to. Quantitative data analysis is making sense of the numbers to permit meaningful interpretation. The afore-mentioned guidelines involve: organizing

the data, checking for completeness and accuracy in the questionnaires, assigning a unique identifier to each questionnaire.

Once all the responses were captured, they were analyzed through the Statistical Package Software (SPSS) by translating raw data into meaningful information and communicating the research results in the form of simple descriptive statistics and graphical representations such as pie charts and tables as a way of displaying findings. In all these findings, the researcher was guided in analysing the data by the objectives of the study. According to Bertram (2003), statistical analysis facilitates the reduction of large-scale data into a manageable form so that tests can be conducted and conclusions can be drawn from it.

1.10 Research quality

Guba (2001) adds that in their haste to complete the research, some researchers do not apply themselves well to their research, and this compromises the quality of the research. In this study, the researcher engaged with literature regarding conducting research in a manner that produces quality results. Mouton (2010) espouses that any good researcher has to always be aware of the study's *rigour* if the method is qualitative, and *validity* and *reliability* if the method is quantitative as forming the basis of good quality research. The afore-mentioned are discussed below.

1.10.1 Research quality in qualitative methods: Rigour

According to Brink, van der Walt, and van Rensburg (2013), reliability and validity are important in all studies; however, they are often viewed with scepticism in qualitative studies for their lack of rigour. Therefore, the afore-mentioned researchers assert that methods of establishing validity and reliability in qualitative research are not the same as those adopted in quantitative research. They also state that rigour in qualitative research refers to openness, relevance, and epistemological and methodological congruence. In order to ensure *rigour* in this study, the following were observed, namely: credibility, dependability, confirmability, authenticity and triangulation, and these are discussed in greater detail in Chapter 4.

1.10.2 Research quality in quantitative methods: Reliability and validity

Joppe (2010) maintains that validity of any quantitative research determines whether the research truly measures what it was intended to measure or how truthful the research results are. Maree and Pietersen (2007) explain that reliability in quantitative research may be assured by the researcher through using similar instruments at different times or administering the instrument to different subjects of the same population and yet get similar results.

From the above explanations of reliability and validity, the researcher has learnt that reliability in research involves consistency. Consistency in this context means that the instrument used to collect data should produce similar results (findings) when used in similar subjects even at different times. Types of reliability tests are test-retest reliability, split-half reliability and internal reliability as per Babbie (2013) and Maree and Pietersen (2007).

In this study, the researcher ensured validity through conducting a pilot study. She also triangulated the study through using mostly similar themes in the learners' focus group interviews, questionnaires, teachers' and the district official's interviews. Another element of validity in this study rested on the questionnaires where the researcher self-administered them to guard against administrator errors. The afore-mentioned allowed the researcher to exert control over the activities and outcomes during the administration of questionnaires.

1.11 Research ethics

Ethical consent was sought and received by the researcher from the Department of Basic Education through the research office based in the Zwelitsha Head Offices. A Research Clearance Certificate was also applied for and received from the Ethics Committee of the University of Fort Hare. Vital components of research ethics discussed below were also observed in this study as per Creswell's (2011) recommendations:

1.11.1 Informed consent

Informed consent, according to Creswell (2011), is required for any study engaging human research subjects or information belonging to other parties. Since the focus of this research is part of the educational process, participation in the programme was by selected students and teachers. Consent to use their information was obtained in writing after a verbal and written explanation had been provided. This was sought from the school principal, teachers, parents, and students who participated in this study.

1.11.2 Confidentiality

An explanatory letter, research request, and confidentiality statement signed by the researcher were given to each participant. Questionnaires were responded to anonymously but coded against the participant's attendance register number for audit trail purposes. The afore-mentioned student codes were known only to the researcher and kept in a secure place.

1.11.3 Risk

As this research was conducted as part of a regular school programme during school hours and at school venues, there was no harm to the students. Participants were informed that if they experienced any psychological or emotional issues due to the questionnaires or interviews and needed to withdraw, they were at liberty to do so.

1.11.4 Compliance with legislation

As far as the researcher could ascertain, the study did not conflict with any state legislation. Privacy of the students was carefully protected with a coding system for all questionnaire responses. There was no discrimination against any student who did not wish to participate in this study.

1.12 Outline of the thesis

This thesis is organized and sequenced in order to contextualize and present the research logically and coherently and address the research objectives and

questions articulated earlier in this chapter. A brief outline of the chapter contents has been presented in table format for easy reading below:

Table 1.1 Chapter contents

Chapter 1	The chapter introduces the reader to their study by giving the background to the study, the problem statement, research questions, objectives and significance of the research, and outlines what the chapters that follow.
Chapter 2	Chapter 2 presents, discusses and reflects on literature regarding critical theory and feminist approaches on gender within the context of patriarchy and socialization.
Chapter 3	This chapter presents, discusses and reflects on literature regarding constructivist discourses on gender, pedagogy and e-learning.
Chapter 4	Chapter 4 identifies and justifies the methodological approach used in this study. It also presents the research design and techniques, its limitations, as well as tools and instruments utilized to collect data.
Chapter 5	This chapter presents the research findings taking into consideration the questions posed in the interviews, focus group discussions, and the questionnaires
Chapter 6	This chapter reconciles and contrasts the findings of the study linking them with the existing body of knowledge and the literature review undertaken in Chapters 2 and 3.
Chapter 7	Based on the findings and literature review, a conclusion of these is drawn, and recommendations are made from the conclusions.

CHAPTER 2 - GENDER: PATRIARCHY AND SOCIALIZATION

2.1 Introduction

Chapter 2 presents a literature review within the context of gender perspectives and how these perspectives could play a significant role in the educational achievement of female learners, particularly in e-learning. This chapter focuses on the scholarly interaction between feminist theories and critical pedagogy and how these intersect with gender within the context of patriarchy and socialization. The plan was to engage with the concepts: gender, patriarchy and socialization and draw on perspectives from feminist and critical pedagogy theories. This plan enabled the researcher to explore these theories in order to understand teachers' gender perceptions' influence in rural and semi-rural school contexts.

The first two aims of this study which are a) to determine the e-learning teachers' gender perceptions; and b) the extent to which these teachers' own gender perceptions influence the e-learning proficiency of female learners are specifically addressed in this chapter.

Furthermore, in this chapter, the concept 'gender' is explored to identify its meaning, how it is understood together with various distinctions attached to it. This exploration includes taking account how patriarchy and socialization linked to the concept of gender. This entails various research strands on the issues of patriarchy and socialization. Most significantly, in weaving together the elements of this chapter, the theories underpinning 'gender' within the context of schools, that is, critical pedagogy and feminism, are highlighted. The intention was to unpack the issue of teacher gender perceptions in schools in a scholarly fashion.

Finally, the chapter draws conclusions and highlights primary discourses in accordance with the research focus of this study, namely, gender perceptions.

This chapter therefore presents the following sections:

- Concept clarification of gender and all its sub-divisions;

- Critical pedagogy and feminism theories as theoretical frameworks of this study;
- Patriarchy; and
- Socialization

2.2 Theoretical frameworks of the study

According to Mouton (2010), frameworks are the lenses through which research questions and objectives can be debated and critiqued. This study sought answers to the following questions as reflected in Chapter 1:

- a) What are the e-learning teachers' gender perceptions?
- b) To what extent do the e-learning teachers' own gender perceptions influence proficiency of female learners in e-learning classes?
- c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

This study's approach is grounded predominantly on the critical theory of pedagogy and complemented by feminist perspectives of education because its focus is on gender perspectives. These are discussed below.

2.2.1 Critical pedagogy

Critical pedagogy is defined by Ralphe (2011) as a framework that is utilized by most educational researchers in research that points out injustice in the education sector. The focus on gender and technology in schools has informed the grounding of this study on critical theory, due to this theory being the foundation of and focus in emancipatory thinking. Many renowned theorists such as Bourdieu (2012), Dewey (1938), Foucault (2006), Freire (1972), Levin (1999), Kincheloe and McLaren (2002), McLaren (2007), and Shor (2007) contribute to support this theory.

One of the first theorists to urge educationalists to consider social justice as an inherent aspect of education was Dewey (1938), who realised that people's class and social positions are perpetuated by the kind of education they received. Dewey (1938) argued that education which only serves the purpose of

supplying the job market is undemocratic and unjust. In this study, the researcher considered Dewey's (1938) argument apt to aid in exploring if teachers' gender perceptions of learners do in any way influence vocational gendered roles of female learners.

According to Kincheloe and McLaren (2002), critical theory is concerned with the power and justice of several issues in society such as economy, race, gender, and education, and this seemed relevant to this study as it explored gender perceptions. In addition, Shor (2007) identifies the principle goals of critical pedagogy as: challenging withdrawal through participatory discourses, intervening regarding scholastic disabling of students through critical awareness programmes, distributing researched and censored information useful for investigating power and policy within schools and societies that are stakeholders in the schools, inviting students to reflect socially on their conditions so as to overcome some of the limits that are imposed on them through their societies, choosing critical consciousness over reproduction of inequality and fostering transformation of schools over reproduction of inequality. In this study, engagement with the female learners through interviews and questionnaires opened up opportunities for them to reflect on prevalent gender perceptions that act as an impediment towards their academic achievement in e-learning in their schools.

This study also draws from various research studies done that have used critical enquiry of technology in order to establish various anomalies and imbalances in e-education governance and implementation. This study, therefore, used the critical pedagogy as one of the frameworks in order to determine the possibility of teachers' gender perceptions negatively affecting e-learning proficiency of female learners.

According to Silverman (2006), critical theorists of technology view skilling through technology as a means of production. Silverman (2006) argues that such skilling has to be viewed in the context of the political, ideological and cultural assumptions of the society that has given rise to it.

Critical theory of pedagogy also assisted this research, as guided by Marshall (2010), to frame the enquiry in order to focus on power, hegemony, and

patriarchy, and the hidden curriculum in schools. Giroux (2008) supports the use of critical inquiry in educational research and views schools as social sites constituted by complex dominant *and* subordinate cultures, each characterised by the power they have to legitimate a specific view of reality. According to Giroux (2008), most schools' view of reality is at odds with that of many of the learners who come from the minority classes or oppressed gender and who are consequently excluded.

Giroux (2008) argues that teachers need to acknowledge that schools are not neutral sites, nor is the curriculum, and that what the students learn from the formal curriculum is much less important than what they learn from the ideological assumptions embedded in the school's three message systems: the system of curriculum, the system of classroom pedagogical styles, and the system of evaluation. Giroux's (2008) argument above speaks to the first and second objectives of this study which examine gender perceptions of teachers, particularly their awareness of their pedagogical styles and hidden curriculum that may be informed by their gender perceptions and may affect female learners' proficiency in e-learning.

Giroux (2008) takes the issue of 'hidden curriculum' discussed in detail in Chapter 3 by arguing that the 'hidden curriculum' is responsible for causing students to internalize values which stress abnormal respect for authority, docility and conformity.

The brief discussion above on critical pedagogy theory, therefore, reflects the pathway of this study and what guides it. In addition to the discussion on critical pedagogy above, this study relates to gender empowerment, and, therefore, some of the principles of feminist research that have been considered in its conception and design are discussed below.

Based on the research objectives and the critical pedagogy inquiry as the main theoretical framework of this study, the implications for this study were that the researcher had to devise research tools that are guided by critical inquiry to explore aspects such as:

- the gendered nature of societies that the teachers and learners are part of;
- the manner in which these societal gender issues affect both the learners and the teachers' perception of gender;
- the manner in which these perceptions of gender are disseminated to the school environment and the e-learning classroom;
- the manner in which the teacher interacts with both female and male learners around the school and the e-learning classroom;
- the manner in which both female and male learners experience the e-learning classroom; and
- the degree to which the teachers are supported to realize the implementation of gender-sensitive e-learning.

Devising such tools had to be considered in the light of not only critical pedagogy, but also in view of feminist perspectives in order to directly problematize the issue of gender explored in this study. The discussion proceeds to feminist perspectives in education below.

2.2.2 Feminist perspectives on education

According to Xaba (2009), feminist perspectives of education belong to the most vibrant social movements of the late twentieth century and have successfully established the terrain of feminist scholarship in the field of education. It needs to be noted that this study is not exclusively grounded on feminism but on critical pedagogy. However, critical pedagogy, on its own, was noted by the researcher to exhibit shortfalls such as those cited by Ellsworth (2012) when it comes to gender issues. In its quest to promote social justice and challenge the status quo, critical pedagogy tends to over-emphasize political influence and under-emphasize gender perceptions' influence on female learners' success (*ibid*). For a study that seeks to explore gender perspectives, this is, therefore, the reason for inclusion of feminist perspectives in this study.

Schools, teachers and learners may adopt different feminist stances; therefore, feminist pedagogy on education can take various forms. This chapter is considered relevant as a background for this study as it gives insight into one of the main discourses within gender research in education through technology

and an update on different understandings of the extent of gender perceptions' influence in e-learning. It is, however, beyond the scope of this study to conduct a detailed review of this massive body of literature.

Below is a discussion of feminist theories. Three positions provided by feminist theories of education through technology are discussed. The researcher then uses the three positions identified to reflect on ways that gender perceptions might influence female learners' success in e-learning. The purpose of presenting the different positions is to show how different perspectives on gender perceptions in education might impact on how female learners engage and succeed in e-learning.

These positions are discussed under equality feminist perspectives (liberal feminism), difference feminist perspectives (radical, Marxist and socialist feminism) and postmodernist and post-structuralist perspectives. It should be pointed out that each one of the feminist perspectives discussed below is interrogated within the context in which it unpacks the concept 'gender perspectives'.

2.2.2.1 Equality feminist perspectives

Equality feminist perspectives focus on the similarities between females and males (Howes, 2002). For the purposes of this study, liberal feminism is discussed under this feminist position.

a) Liberal feminism

Liberal, otherwise known as equality feminist thinking is based on the argument that females have been kept away from science and technology because of political and social forces in societies (Howes, 2002). Thus, the key to improving female participation in science and technology is to address and change the political, educational and social factors that keep females away from science and technology.

In addition, liberalist feminism argues that ignorance is the main cause of sexual inequality, and thus knowledge dissemination and awareness-raising as well as the passing of legislation to eradicate sexual inequalities is key (Weiner, 1994:71). In schools, a major goal for liberalist feminist pedagogy is thus gaining

access to educational resources previously denied and helping females overcome socialization experiences that have limited their aspirations (Enns & Sinacore, 2005). In the context of this study, it was important to determine the extent to which female learners had access to computers in the schools. In this feminist terrain, focus is on campaigning for change in order to address female learners' failure or underachievement in the schooling system, sex-stereotyping in subjects such as Mathematics, Science and Technology and in careers, bias in learner assessment and sex-differences in school staffing and management systems, for example (Weiner, 1994).

Criticism of liberalist feminist pedagogy is that it is obsessed with sameness and that it fails to acknowledge and engage in diversity of gender perceptions and their ability to influence the educational success of particularly female learners (Lu, 2012). It is not enough to fight for access to education for female learners, there has to be interrogation of the lived experiences of the female learners within the educational institutions. Hence, it became necessary for this study to explore different feminist perspectives (radical feminism) which are discussed below.

2.2.2.2 Difference feminist perspectives

Nash (2000) explains that difference feminists claim that males and females have different approaches to life in general. They see the notion of "equality" as problematic because it is seen to reproduce a male norm (*ibid*). Radical feminism is discussed under this subtopic.

a) Radical feminism

According to Weiner (1994), patriarchal forces and male-dominated power relations in the schooling system are what radical feminist perspectives see as the result of inequalities. Thus, the responsibility and solution of inequalities does not only reside in the schooling system, but needs to be considered on different levels which perpetuate gender perceptions and stereotypes (*ibid*). Keller (2003) cites an example of sexist metaphors and visuals in e-learning textbooks that perpetuate gender stereotypes in schools.

In this study, radical feminism was targeted in order to explore the level of influence of the rural and semi-rural communities on teachers' gender perceptions towards e-learning. Some feminist arguments emphasising the differences between males and females have claimed that the qualities of females are better than those of males (Manning, 2010). Gilligan (1982) cited in Manning (2010: 36) described females' moral reasoning to be dominated by an "ethic of care" as compared to males' "ethic of rights".

Criticism of radical feminism is that specific consideration is given to power relations and patriarchal processes by prioritising the role of sexuality in the oppression of females in the schooling process (Weiner, 1994). In view of the above criticism of radical feminism, the researcher explored Marxist and socialist feminism below.

a) Marxist and socialist feminist stances

Marxist and socialist feminisms tend to regard school systems as the terrains upon which sex and class struggles are performed rather than where social change takes place (Weiner, 1994). This is because of the role of education systems in preparing learners for the world of work and the profound influence this has on how learners accept their assigned roles as paid and unpaid workers as well as fulfil roles that are consistent with their gender, class and racial backgrounds (Enns & Sinacore, 2005). In this study, this aspect of Marxist and socialist feminist was viewed as useful in interrogating how teachers' gender perceptions influenced gender roles in female learners in view of technology-based vocations.

According to Harding (2006), by virtue of being oppressed, females have common experiences and a common way of viewing the world that sets them apart from the oppressors. Building on Marxist and socialist theories, Harding (2006) claims that the knowledge and culture of a class society reflects the interests of its ruling class. Thus, of interest to scholars in this domain is the relationship between family, schooling and the labour market in maintaining dominant class and gender relationships (Weiner, 1994). The point above was viewed as useful in this study in exploring how the families of female learners, together with teachers' gender perceptions, worked collaboratively in, possibly,

affecting female learners' academic success, specifically within the context of technology, which is historically viewed as a male arena.

For the education context, inequalities become more than just political but personal, social and economic (Manning, 2010). Moreover, the hidden curriculum needed to be given attention to see how pedagogy “reinforces inequities” so that hidden problems can be made explicit in order to be challenged (Enns & Sinacore, 2005: 23). Hidden problems might include: stigmatisation, affirmative action, victimisation, stereotyping, exclusion, tokenisation and gender absence (*ibid*). Some of the problems highlighted above such as victimization, stereotyping and exclusion are explored in this study.

According to Manning (2010), difference feminists have been criticised for treating all females alike. Such criticism is based on the fact that by treating females as one single group, all the different voices will not be heard (*ibid*). Females, according to Haraway (1991), are not one identical group and do not have one identical story to tell; within the group of females there are huge differences, and females do not view the world in the same way.

The discussion proceeds to the last of the three positions, which is the postmodern and post-structuralist feminist stance.

2.2.2.4 Postmodern and post-structuralist feminist stances

Mabovula (2004) explains that postmodernist and post-structuralist feminists argue for recognition and celebration of differences between genders and the importance of encouraging the recovery of previously silenced voices. They acknowledge how knowledge and power manifest and open up the ability for counter-discourses to emerge (*ibid*). A primary issue of this feminist position is promoting critical awareness of the gender perspectives in schools and in educational discourses (Weiner, 1994). In addition, by taking note that “reality is created” and does not exist as a “natural or true state”, these feminists consider all meaning systems and truths to be: (i) socially constructed, (ii) mediated and modified by specific contexts, (iii) influenced by power structures, and (iv) fallible (Enns & Sinacore, 2005:44).

In this study, postmodernist and post-structuralist feminism approaches are explored in order to aid in examining the distinctions of socialization and how teachers' gender perceptions may possibly be a product of socially constructed genders based on their backgrounds. Feminist thinkers informed by postmodernism have challenged the belief that females are united by biological sex and have asserted that the "category of female" is neither natural, nor essential, but socially constructed (McPherson, 2000: 12). McPherson's argument (2000: 13) raises the issue of "situated knowledge", which is fundamental to this study's interpretivist approach. According to the theory of situated knowledge, all knowledge is situated, and no position is more privileged than others when it comes to viewing the world (*ibid*). Situated knowledge theory further claims that nobody (oppressed or oppressors, male or female) can see the world more clearly than others. The argument is that neither males nor females are in a position to describe the world on any other's behalf than on their own.

In this study, postmodernist and post-structuralist feminism approaches were also viewed as useful because of their stance of promoting critical awareness of the position of teachers and learners in educational discourses; and this is applied in the context of rural and semi-rural schools.

Criticism of the post-modernist and post-structural feminist pedagogy is that its arguments are not clear in some areas regarding diversity.

In summation of the three positions of feminism, the researcher acknowledges that all the above feminist perspectives have their advantages and disadvantages. It is through such knowledge that the researcher sought to sieve through in order to identify aspects in each one of the perspectives that speak to the objectives of the study.

Moreover, in exploring feminist perspectives of education, this study acknowledges the dynamics of *difference*, *similarity* and *social construction* as espoused by these three positions gender perspectives. According to Sawicki (1991), peoples' differences and similarities may be used either to divide nations or to enrich its politics. "If we are not the ones to give voice to these differences,

then history suggests that they will continue to be either misnamed and distorted, or simply reduced to silence” (Sawicki, 1991:54).

Due to the vast nature of the literature on gender and for the purposes of this study, the focus of the discussion in this chapter is on two important aspects of gender, namely, patriarchy and socialization. This discussion is preceded by the conceptual clarification section below which is meant to guide the readers of this study to an understanding of different concepts of gender.

2.3 Conceptual clarification

2.3.1 Gender

Palm-Forster (2000) describes gender as the person’s personal and psychological experience of being a female or male. Lope (2000) adds to this description by saying that gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviour, values, relative power and influence that society ascribes to the two sexes on a differential basis. Lope (2000) further claims that whereas biological sex is determined by genetic and anatomical characteristics, gender is an acquired identity that is learned, changes over time, and varies widely within and across cultures and societies. Richmond-Abbott (2000) explains that the term *gender* indicates *sex roles* and *gender roles* because gender is often aligned to social roles and/or social positions in diverse ways and according to time and specific societies.

Lope (2000) insists that many feminists have historically disagreed and have endorsed the sex/gender distinction. According to liberal feminist Enns and Sinacore (2005), *sex* denotes human females and males depending on biological features (chromosomes, sex organs, hormones and other physical features); *gender* denotes females and males depending on social factors (social role, position, behaviour or identity). The main feminist motivation for making this distinction was to counter biological determinism or the view that biology is fixed.

2.3.2 Gender perceptions

Gender perception is defined by Gender Spectrum (2010) as the manner in which individuals are classified as either male, female or transgendered. The afore-mentioned explain that these types of perception are frequently dependent upon physical cues such as genitalia, facial hair and body structure. As a term, 'gender perception' may be used to describe group perceptions about gender, as well as individual perceptions about one's own gender (Papallia, 2003).

Mabovula (2004) explains that feminist theories of sociology and psychology have debated the issue of gender perceptions widely in terms of the various viewpoints that individuals hold regarding gender. Mabovula (2004) further explains that such debates examine the roles played by communities, families, schools and churches in influencing such gender perceptions. In this study, this is important as such perspectives would add value regarding what influences the gender perceptions of teachers. Jones (2011) explains that throughout the world, gender perception is commonly used to classify people into two predominant categories — male or female.

Jones (2011) further explains that at birth this determination is made upon observing the genitalia of a new-born, and that particular gender classification tends to shape the way that child is raised and taught to view himself or herself. Xaba (2009) adds that societal norms, in particular, play a role in how a person views his or her own gender, as well as how his or her gender is perceived by others. For example, new-born girls and boys are dressed in different colours and styles of clothing, as well as offered different toys to play with as they begin to develop (Xaba, 2009). Taught to look, behave and perceive one's self as male or female, this gender role is generally accepted by the child and others for life (Papallia, 2003).

From the above, it can therefore be understood that gender perception is a universal concept that classifies different genders. Gender perception is grounded on differentiation between male and female and is influential in how different genders perceive themselves and the opposite gender.

2.3.3 Gender identity

According to Papallia (2003), gender identity is a person's private sense and subjective experience of his/her own gender. LaFrance, Pluck and Bristol (2008) add that as a term, *gender identity* serves a specific function. It allows individuals to express their attitude and stance in relation to their current status as either females or males. The above authors maintain that this identity turns the scope of gender from a social consensus to one's self-identification with a certain gender expression and leaves much more space for describing variation among individuals.

This sense of one's gender identity is, according to Diamond (2007), acquired through the internalization of external knowledge. The above author also states that external knowledge feeds the notion of womanhood or femininity, and is accomplished through an active process of creating gender by interacting with others in a particular social context. Diamond (2007) further maintains that this internalized external knowledge is never fully acquired and is of the opinion that it is constantly re-enacted in social interactions throughout one's life. Alsop, Fitzsimmons and Lennon (2009) take this argument further by positing that gender identity is part of an identity woven from a complex and specific social whole. They conclude that gender identity can therefore be placed as part of a socially situated understanding of gender.

As mentioned above, the manner in which gender identity is constructed for an individual depends on gendered interactions the individual has with others as well as other identities or roles s/he may have. Hurtado (2010) argues that white females and black females experience gender issues differently because of their relationships to males and that both groups of females are used to substantiate male power in different ways. This, according to Jones (2011), causes them to behave differently, and this behaviour is determined by how they experience core gender issues and identities within their societies. Jones (2011) also argues that while males and females are held accountable for normative conceptions of gender, this accountability can differ in content based on, among others, ethnicity, race, age, and class.

It can therefore be understood that gender identity is a subjective experience woven from a complex interaction within societies.

2.3.4 Gender accountability

According to Papallia (2003), gender accountability refers to how individuals hold themselves and each other accountable for their presentations of gender (how they 'measure up'). Lerner (2010) adds that people are often aware that others may assess and characterize their behaviour, and this is an interactional process rather than an individual one. This, according to Lerner (2010), means that people can always be judged by what they do as males or as females depending on the society's understanding of gender accountability and is the basis for the reasoning that people are always 'performing' gender. Xaba (2009) is of the opinion that gender accountability can apply to behaviours that conform to cultural conceptions as well as those behaviours that deviate from these conceptions. According to Xaba (2009), it is the possibility of being held accountable that is important in society that drives certain behaviours between females and males.

For example, Strobe (2011) examined the rationale that males and females gave for why there were small numbers of females in the auto industry. Males cited the idea that such dirty work was unsuitable for females, and that females were unable to train for such work because of family duties. Strobe (2011) argues that the male workers, in order to account for the auto industry's gendered activities, created a *machismo* masculinity to distinguish themselves from females who might have been qualified to work in the auto shop. On the other hand, Strobe (2011) points out that in order to account for this situation, females who work in male-dominated professions have to carefully maintain and simultaneously balance their femininity and professional credibility. Strobe (2011) argues that this accountability of gender ultimately decodes itself to gender roles and acting out of those gender roles, as discussed below.

From the discussion above, it appears that gender accountability refers to how humans hold themselves accountable for how they measure up as male and female.

2.3.5 Gender roles

Papallia (2003) defines gender roles as behavioural descriptions and expectations about one's gender. Richmond-Abbott (2000) further adds that gender roles are socially created expectations of masculine and feminine behaviour. When various publications such as those of Jones (2011) and Genderlinks (2012) discuss the notion of gender and identities, the discussion often leads to a discussion of gender roles wherein the term *doing gender* becomes prevalent. The Genderlinks (2012) report adds that *doing gender* is active engagement in any behaviour that is gendered, or behaviour that may be evaluated as gendered.

Jones (2011) further argues that the performance of gender varies given contexts such as time, space, and social interaction; the enactment of gender roles is context-dependent because roles are *situated identities* instead of being *master identities*. Jones (2011) is also of the opinion that by *doing gender*, people reinforce the essential categories of gender, and that though sex categorization is based on biological sex, it is maintained as a category through socially constructed displays of gender. According to Lerner (2010), the idea that males and females are essentially different is what makes males and females behave in ways that appear essentially different.

From the discussion above, it seems that gender roles are underpinned by gender values that are socially constructed and actively played out in societies;

2.3.6 Gender equality

Genderlinks (2010) describes gender equality as the concept that all human beings, both males and females, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices. The United Nations Development Programme (UNDP) Report (2009) adds to this definition by saying gender equality is a mechanism that is put in place to ensure that the different behaviours, aspirations, and needs of females and males are considered, valued, and favoured equally. This report further explains that it does not mean that females and males have to become the

same, but that their rights, responsibilities and opportunities will not depend on whether they are born male or female.

From the above discussion it appears that gender equality promotes the idea that males and females are free to develop their abilities and supports equal opportunities and aspirations for both sexes.

2.3.7 Gender equity

According to Genderlinks (2010), gender equity refers to a practice of fairness of treatment for females and males according to their respective needs. This may include equal treatment, or treatment that is different but considered equivalent, in terms of rights, benefits, obligations and opportunities. In the development context, a gender equity goal often requires built-in measures to compensate for the historical and social disadvantages of females. From the above discussion, it appears that the gender equity values fairness of treatment for both sexes.

2.3.8 Gender stereotypes

Gender-role stereotypes are defined by Stephens (2012) as simplistic generalizations about gender attributes, differences, and roles of individuals and/or groups. Stephens (2012) further asserts that stereotypes can be negative or positive, but that they sometimes communicate inaccurate information and perceptions about others. Perceptions are defined by the Medterm's (2012) book as the way people think about or understand someone or something. When this term is applied to the concept of *gender*, it can be understood to refer to how different genders perceive one another. Lerner (2010) posits that gender perceptions influence gender stereotypes, but that this influence is mutual since some people view or perceive opposite genders based on socially and culturally held gender stereotypes. From the discussion above it is understood that gender stereotypes are influenced by socially and culturally conceived perceptions.

For purposes of this study, further discussion on gender stereotypes and how they link to patriarchy is done under section 2.4.3.

2.3.9 Sexuality

According to Papallia (2003) sexuality and sexual orientation refer to the whole way a person goes about expressing him/herself as a sexual being. Medterms' (2012) book defines sexual orientation as the person's preference towards the type of sexual partner he/she chooses. De Beauvoir's (1989: 14) (cited in Mabovula, 2004) quote, "one is not born a woman, but becomes one" resonates with the above explanation. Diamond (2007) links this evolving nature of gender to the concept of sexuality and sexual orientation. They show this link through discussion of their research findings on individuals who conducted sex-change operations.

Diamond (2007:116) argues further that gender identity and sexual orientation are fluid and do not always fall into two essentialist categories (male or female and gay or straight). Apparently, heterosexuality is assumed for those individuals who appear to act "appropriately masculine" or "appropriately feminine". They also assert that, according to this assumption, if one wants to be perceived as a lesbian, one must first be perceived as a female; if one wants to be seen as a gay male, one has to be seen as a male.

From the discussion above it seems that sexuality only recognizes two genders, which is female and male, and the choice of changing one's gender becomes socially constructed through sexuality.

2.3.10 Femininity and Masculinity

According to Wilmer (2009), femininity refers to the quality of being feminine. Wilmer (2009) adds that femininity also refers to a characteristic or trait traditionally held to be female, and certain character traits based on this traditional definition are, among others, empathy, beauty, gentleness, sensitivity, and compassion. Wilmer (2009) explains that masculinity refers to a person's possession of qualities traditionally associated with males; personality characteristics traditionally associated with masculinity are handsome, muscled, driven, and strength. According to Orner (1974), a female's biological role is strongly embedded in the social and cultural construction of who a female is, and this is linked to femininity. Orner (1974) further maintains that in most

cultures, a female's biological role, which includes motherhood and childbearing, is perceived as being feminine and not perceived as separate from being a wife and custodian of the home, which are both social and economic roles.

According to Davidson (2009), socio-culturally, being a female embodies womanhood, femininity and family. Thomas (2003) concedes that this idea seems prevalent among Xhosa communities, which is where this study takes place; and that masculinity and femininity are ascribed to social features as well as to biological ones. Xaba (2009) explains that in rural areas, if a young boy shows softness (*ukuthamba*), which is considered a characteristic of femininity, the father gathers the uncles to *straighten* him up. The latter is done through various harsh activities such as stick fights and putting him in hunting trips until characteristics of masculinity *come out*. Xaba (2009) explains further that in worst cases, the boy would be sent to circumcision school at a much earlier age so that he can develop characteristics associated with masculinity.

From the above discussion, it appears that the concepts *femininity* and *masculinity* are based on idea that males and females are different, and are ideas and assumptions that make males and females behave in different ways.

Within the Xhosa context, it appears that femininity and masculinity are viewed in terms of physical "softness" for femininity or "hardness" for masculinity. Furthermore, it seems as if masculinity traits are forced upon young Xhosa males by adult members through exposure to harsh activities that can harden the individual in order to be masculine.

So far, the discussion above has centred on unpacking gender as the focus of this study. However, gender cannot be discussed without the inclusion of patriarchy, specifically because the schools in this study are in rural and semi-rural areas which, according to Mabovula (2004), are steeped in patriarchy. This is because, according to Mabovula (2010), patriarchy plays a big role in how gender issues manifest themselves in societies and how gender perceptions are formed. Below is a discussion of patriarchy in greater detail.

2.4 Patriarchy

In order to indicate how the role of patriarchy in gender issues is expressed in society, patriarchy is discussed under the following subheadings namely:

Patriarchy's influence on gender, Exploitation, Discreditation and lack of support, Oppression, Gender discrimination, Subordination, Sexism and sexist behaviour, Contamination, Female disrespect, Gender-based violence, Not taken seriously, Misogyny, Biological determinism, Public and Private Realms and Gender-role stereotyping.

2.4.1 Patriarchy's influence on gender

As mentioned above, there is a prominent link between patriarchy and gender. This link is confirmed further by the Asian and Pacific Institute on Domestic Abuse (APIDA, 2014), namely, that patriarchy is about the social relations of power between males and females, females and females, and males.

The Oxford dictionary (2007) defines patriarchy as a system of society or government in which the father or eldest male is head of the family and descent is traced through the male line. A second definition by the same source is that patriarchy is a system of society or government in which males hold the power and females are largely excluded from it. A definition that looks at patriarchy from a domestic angle is from Lope (2000) who says patriarchy literally means *rule of the father* in a male-dominated family. Lope (2000) adds that patriarchy is a social and ideological paradigm which views males (who are the patriarchs) as superior to females. According to the UNDP Human Development Report (2011: 56), patriarchal ideologies refer to a system of ideas which originate from males as leaders and continue to be active in a system where the "male is in charge over females".

The UNDP report (2011) further explains that these patriarchal ideologies result in patriarchal constructions of knowledge, and such constructed knowledge is reflected in educational institutions, knowledge systems, and media which reinforce male dominance. Chacko (2003) adds that in African communities, such as the ones that this study is conducted in, patriarchy plays a major role in

influencing people's gender perceptions and how these are acted out in communities.

Patriarchy is a widely researched concept and various researchers from a variety of fields have come up with many definitions of this concept. Such researchers (Crawford, 2014; Lewis, 2012; Mohanty, 2003; Ralphe, 2011) have examined this concept from feminist, sociology, anthropology, psychology, and education perspectives. Since patriarchy has been examined prevalently from a sociology viewpoint and not so much from education, which is the focus of this study, the researcher therefore aligns this study with feminist, sociological, as well as educational perspectives of patriarchy.

When examining the issue of patriarchal societies and how they affect female learners' learning prospects, it is vital to explore various feminist theories which argue that schools take the baton from the homesteads and carry on fostering the societal values that discourage female learners from growing within the education domain. According to Lewis (2012), radical feminists have an issue with research that does not shed enough light regarding the actual patriarchal practices that affect those female learners that are registered within schools. From a radical feminist perspective, specific consideration is given to power relations and patriarchal processes by prioritising the role of sexuality in the oppression of females in the schooling process (Weiner, 1994:68). Manning (2010) argues that it is regrettable that most research largely emphasizes equality of access to schooling for female learners and does not explore deeper into specific curricula and learning implementation that validates the female learners.

In looking at patriarchy from the perspective of feminism, the point of departure is the patriarchal theory coined by feminist movements. Lewis (2012) points out that this much challenged theory maintains that certain rules and practices of society have kept females in a subservient role and that institutions of society, run by males, have continued these practices over time. Dlodlo (2010) posits that patriarchy changes from time to time, and insists that gender relations, which are dynamic and complex, have also changed over periods of history.

According to Chacko (2003), patriarchy has a long history, globally, and more so in the African continent.

The persistent patriarchal attitudes in Africa tended to prevent researchers from problematising the gender issue. Chacko (2003) cites the example of township female learners in Botswana who spend more of out of school time on household chores, a point which seems to be justified socially. Chacko (2003: 34) further adds that feminism, therefore, assists both females and males to see these gender issues as “unjust” and begin to deliberate on how best to tackle them. Freedom, for Freire (1989), begins with the recognition of a system of oppressive relations, and one’s own place in that system. The task of critical pedagogy is to bring members of an oppressed group to a critical consciousness of their situation as a beginning point of their liberatory praxis. He states that students have previously been lulled into a sense of complacency by the circumstances of everyday life, and that through the processes of the classroom, they can begin to envision and strive for something different for themselves.

2.4.2 Exploitation

Manning (2010) states that exploitation of females, according to feminism, refers to the use or portrayal of females in societies and mass media (such as television, film and advertising) in a disrespectful manner to increase the pleasure of males to the detriment of, or without regard to, the interests of the females portrayed, or females in general. The most often criticized aspect of the exploitation of females, according to Manning (2010), is objectification where females are portrayed as sex objects. Sociologically, Walby (1990) explains that in patriarchal societies, there are many systems of social structures and practices in which males exploit females for their own pleasure. In addition, in patriarchal societies, according to Wainana (2008: 47), females are exploited through several means where culture is used to ‘brainwash’ them to believing that male domination is a given. In such cases, Wainana (2008) continues, various rituals that are abusive to females are accepted as a norm and never questioned by such patriarchal societies.

From the discussion on female exploitation, it appears as if female exploitation is the depiction of females in impolite way occurring through communities and mass media such as television, film and advertising. It is justified through cultural practices and is done primarily for the pleasure and entertainment of males.

Feminists of a variety of different persuasions have seized upon the concept of patriarchy in the search for subordination and exploitation since these are viewed as damaging to the welfare of the females portrayed, or females in general (Mabovula, 2004).

From a feminist perspective, according to Young (1999), female exploitation is evident in material fruits of labour and the transfer of nurturing and sexual energies both of which are beneficial for males. In this study, it is essential to determine if teachers' gender perceptions possibly exhibit elements of female exploitation and oppression.

2.4.3 Discreditation and lack of support

According to Citron (2006), female discreditation is a form of suppression of females' abilities by males so that the females appear weak and males appear strong. Mabovula (2004) adds that, in most patriarchal societies, females' abilities are trivialized, and females are discredited and only acknowledged for their child-bearing activities.

From the above discussion, it appears that female discreditation is a form of overpowering of the females' abilities by males.

2.4.4 Oppression

Gobodo-Madikizela (2009) defines oppression as the inequitable use of authority, law, or physical force to prevent others from being free or equal. Walby (1990) explains that, in the case of female oppression in patriarchal societies, there is a system of oppressive power relations which are hierarchical and unequal where males oppress through control of females' production, reproduction and sexuality. In this study, it is important to determine the teachers' gender perspectives in order to determine the presence of the oppressive power relations between males and females. Gobodo-Madikizela

(2009) claims that patriarchy imposes masculinity and femininity character stereotypes in societies, and this strengthens the oppression of females by males. Maholwana-Sotashe (2007) adds to this statement by maintaining that the nature of control and oppression of females varies from one society to another as it differs due to the differences in class, religion, region, ethnicity, and other socio-cultural practices.

From the discussion above on female oppression, it seems as if female oppression is the biased use of authority, regulation, or physical force to prevent females from being unrestricted or equal. Lorber (2012) points out that according to socialist feminism, female oppression stems from their disadvantaged position in the economy, particularly in patriarchal communities and societies. Radical feminist perspectives add that female oppression is manifested, in patriarchal societies, where females (comprising heterosexuals and lesbians) become a class which is viewed as inferior to the class of male (Young, 2000). This author adds that another face of female oppression is marginalisation. Marginalisation can be related to gender, race and class but it also includes the exclusion of some persons (Young, 2000), and in this study, the concern is gender. Mabovula (2010) explains that the marginalised often experience material deprivation, which a few countries have addressed in the form of welfare payments and services for a select few, such as in the female learners in this study.

2.4.5 Gender discrimination

Gender discrimination, according to Genderlinks (2010), refers to discrimination based on gender, especially discrimination against females; it is a belief that one gender is superior to the other, especially that males are superior to females (ibid). Ray (2011) states that through patriarchy there are reported experiences where females are not only treated as subordinate to males but are also subjected to discrimination, humiliation, exploitation, oppression, control and violence. Ray's (2011) explanation of the above statement is that females experience discrimination and unequal treatment in terms of the basic right to food, health care, education, employment, control over productive resources, decision-making and livelihood not because of their biological differences or sex,

which is natural, but because of their gender differences, which is a social construct. According to Xaba (2009), gender differences are man-made, and they become legitimised in a patriarchal society through discrimination. Xaba (2009) further supports the above statement by saying that gender discrimination and exploitation are widespread, and that socio-culturally defined characteristics, aptitudes, abilities, desires, personality traits, roles, responsibilities and behavioural patterns of males and females contribute to the inequalities and hierarchies in society.

From the above discussion, it seems as if gender discrimination is unequal treatment of females in terms of their basic rights to food, health care, education, employment, control over productive resources, decision-making and livelihood.

2.4.6 Subordination

Ray (2011) explains that subordination of females in developed countries is experienced differently from subordination of females in developing countries. While subordination of females may differ in terms of its nature and certain characteristics mentioned above, such as control over females' sexuality and her reproductive power, cut across class, ethnicity, religions and regions, it is common in all patriarchies. Ray's (2011) argument is that the domination/subordination dynamics have progressed historically and are entrenched and legalized by numerous ideologies, societal practices, and establishments such as family, religion, education, media, law, state and society.

From the discussion on subordination above, it appears that female subordination exists through class, ethnicity, religions and regions and is common in patriarchal communities. It is also rooted and endorsed by many ideologies, shared practices, and institutions such as family, religion, education, media, law, state and society.

2.4.7 Sexism and sexist behaviour

Sexism is defined by Papallia (2003) as attitudes or behaviour based on traditional stereotypes of sexual roles. Papallia (2003) adds that sexism is

mostly characterized by discrimination or prejudice based on a person's sex and involves discrimination against females. Zak (1997) explains that sexist behaviour is manifested through gender stereotypical utterances, disrespect and violence towards females.

From the above discussion on sexism, it appears as if sexism is typically characterized by discrimination or bias based on a person's gender and involves acts of discrimination against females.

2.4.8 Contamination

According to Olga (1994), males seem to imagine that the femininity and all that it comes with is contagious to males. Green (cited in Olga, 1994) posits that there exists a *female contagion theory* where males believe that being around females and interacting equally with them is likely to turn males into *sissies*, and they will lose the power that they have over females. The afore-mentioned contagion theory also refers to how males fear and perceive female menstruation as unclean, and are of the opinion that a female who is having a period is contagious and will contaminate them and their manhood. According to Bam (2009), in the Xhosa tradition one of the main lessons taught to male initiates is never to sleep with a female who is having her period as this will weaken the males.

From the above discussion on contamination, it seems as if contamination is the perception from males where they seem to imagine that femininity is contagious to males.

2.4.9 Female disrespect

Crawford (2014) terms female disrespect as lack of respect that is directed at females by males and sometimes by other females. Robinson (2012) insists that patriarchal societies have raised males to be disrespectful towards females. Robinson (2012: 45) continues that males, in their own ways, have been taught subtly from a very young age that the world belongs to them; that they are powerful and are “masters” among the human species. Robinson (2012) further argues that this disrespect has been so ingrained in males such that sometimes they are not even conscious that they are being disrespectful to females.

According to Kershner (2007) (cited in the Genderlinks Report, 2012), there are different subtle and non-subtle signs of disrespect towards females. These signs of disrespect are: name-calling, ignoring when being spoken to, physical and mental abuse, cheating, belittling females in public, controlling, being late and making females wait, cockiness, and self-centeredness when dealing with females.

From the above discussion, it appears as if female disrespect amounts to lack of respect that is directed at females by males. Patriarchal societies promote female disrespect through socializing males to be disrespectful towards females, and males sometimes unconsciously disrespect females due to the deeply ingrained belief that they are superior to females.

2.4.10 Gender-based violence

According to the South African Police Service (2013) Report, gender-based violence is any form of violent behaviour that occurs across genders, mostly from males directed towards females.

The previous mentioned report states that gender-based violence includes any act or threat by males or male dominated institutions that inflict physical, sexual, or psychological harm on a female or girl-child because of their gender. Most cultures, traditional beliefs, norms and social institutions legitimize and therefore perpetuate violence against females (*ibid*).

Gender-based violence includes physical, sexual and psychological violence such as domestic violence; sexual abuse, including rape and sexual abuse of children by family members; forced pregnancy; sexual slavery; traditional practices harmful to females, such as honour killings, burning or acid throwing, female genital mutilation, dowry-related violence; violence in armed conflict, such as murder and rape; and emotional abuse, such as coercion and abusive language.

Gender Spectrum (2010) explains that trafficking of females and girls for prostitution, forced marriage, sexual harassment and intimidation at work are additional examples of violence against females. Ray (2011) states that gender-based violence occurs in both the 'public' and 'private' spheres, and such

violence not only occurs in the family and in the general community, but is sometimes also perpetuated by the state through policies or the actions of agents of the state such as the police, military or immigration authorities. Ray (2011) further pronounces that gender-based violence occurs in all societies, across all social classes, with females particularly at risk from males they know. According to People Against Women Abuse (POWA) cited in Manning (2010), the historical nature of gender-based violence confirms that it is systematically entrenched in culture and society, reinforced and powered by patriarchy.

According to Genderlinks (2010), South Africa has one of the highest incidences of gender-based violence that occurs in the home, called domestic violence. Every day, females are murdered, physically and sexually assaulted, threatened and humiliated by their partners within their own homes (*ibid*).

Gender violence researchers Jacobson and Gottman (2007) argue that abusive and violent males use fear against females as a force that provides battering, and its power and injuries help sustain the fear. These authors also point out that due to males' physical (and often social) superiority, male violence against females creates enormous long-term physical and psychological consequences, far more so than female violence.

According to the National Child Traumatic Stress Network (NCTSN) (1995), a study conducted by Masimanyane Women Empowerment, a non-profit organization in the Eastern Cape where this study is situated, sheds more light on the issue of gender-based violence amongst school-going female and male learners. This study found that 13% of teenage female learners in a relationship admit to being physically hit or injured by their boyfriends; nearly one in five teenage female learners who have been in a relationship said when a boyfriend threatened violence or self-harm she broke up with him, and one in three teens reported knowing a friend or a peer who has been hit, punched, kicked, slapped, or physically injured by their partner (*ibid*).

2.4.11 Not taken seriously

According to Palm-Forster (2000), in patriarchal societies females are not taken seriously. Such treatment is reflective of disrespect that is predominant in such

societies, as per Manning (2010). According to Manning (2010), males disregard females' abilities, undermine their potential, and abuse them because males feel that females are inferior entities.

From the discussion above on females not being taken seriously, it appears that males undermine and disrespect females through various behaviours directed at the latter. In addition, females are not taken seriously in different spheres such as the home, work and social spaces.

2.4.12 Misogyny

According to sociologists Johnson and Johnson (2010), misogyny is a cultural attitude of hatred for females simply because they are female. Xaba (2009) adds to the definition of misogyny as an ideology or belief system that has accompanied patriarchal or male-dominated societies for thousands of years and continues to place females in subordinate positions with limited access to power and decision-making. Johnson and Johnson (2010) argue that misogyny is a central part of sexist prejudice and ideology and, as such, is an important basis for the oppression of females in male-dominated societies. According to Johnson and Johnson (2010), misogyny is manifested in many different ways, from jokes to pornography to violence to the self-contempt females may be taught to feel towards their own bodies.

From the above discussion, it appears that misogyny is a cultural and traditional attitude of abhorrence for females because they are female. It promotes sexist prejudice against females and places females in subordinate positions through stripping of their power. Misogyny is acted out through gender-based violence directed at females such as bad jokes and pornography and socializes females to develop self-contempt.

Desai and Krishnaraj (2004) argue that understated demonstrations of patriarchy are through depictions communicating inferiority of females through myths highlighting the self-sacrificing, self-effacing pure image of females and through ritual practices which emphasizes the role of a female as a faithful wife and devout mother.

Misogyny seems evident during the Xhosa ceremony called bride education (*ukuyala*), where the bride is given a set of rules to abide by in her in-laws' home. During this ceremony, according to Mndende *et al.*'s (2008) explanation, the bride is repeatedly told that her husband should be constantly worshipped as he symbolized a master, owner, or provider, and that the female is a subordinate. Mndende *et al.* (2008) go on to say that some elderly females often tell the bride to never question the husband's infidelities; instead, when he comes home late, she should wash his feet and give him a warm meal to welcome him home.

2.4.13 Biological determinism

Papallia (2003) explains biological determinism as the common understanding that almost all human attributes and behaviours are innate and cannot be altered. Simply put, the term *biological determinism* refers to the use or emphasis of biological principles explaining human behaviour. An example of this is cited by Mabovula (2010) as the societal expectation that any female, by virtue of having a uterus, should be a mother and embrace motherhood. Mabovula (2010) further maintains that patriarchal societies seem to propagate the ideology of motherhood through their insistence that a female's body is created for this task primarily.

According to Gobodo-Madikizela (2009), patriarchal societies perpetuate biological determinism, which has a negative impact on females because it restricts females' mobility and burdens them with the responsibilities to nurture and rear children. Gobodo-Madikizela (2009) further points out that this biological factor of bearing children is linked to the social grounding of females' responsibilities of motherhood which are nurturing, educating and raising children by devoting themselves to family. Heywood (2003) adds to this assertion by pointing out that patriarchal ideas distort the difference between sex and gender and assume that all socio-economic and political distinctions between males and females are entrenched in biology or anatomy.

Another dimension of biological determinism is from Berry (2010) who states that biological determinism is a hierarchical social classification assigned to females based on the perception of female genitalia. Berry (2010) goes on to

say that this social classification is acted out at work through discriminatory practices where females are prohibited from doing certain jobs, at home where the girl child is not allowed certain privileges, and in some churches where females are viewed as too contaminated to perform tasks that are considered too pure or Godly.

From the discussion on biological determinism, it would appear as if male and female traits and characteristics are inborn and cannot be altered. Males exert their control over females through sexuality and reproduction, and females are expected to be natural nurturers and embrace motherhood. In addition, girl-children are expected to accept the male hierarchy at their homes and cannot enjoy certain privileges that their male siblings are enjoying.

Female reproduction is strongly debated by a wing of radical feminism called radical-libertarian feminism, according to Nash (2000). These feminists believe that femininity and reproduction limit females' capacity to contribute to society, and females should ideally be androgynous (*ibid*). Mulemwa (2004) adds that radical-libertarian feminists believe females should control every aspect of their sexuality and advocate for artificial means of reproduction so that less time is devoted to pregnancy and more time is devoted to worthwhile things. They are strong promoters of abortion, contraceptives and other forms of birth control (*ibid*). In the context of this study, this view could be seen as radical by females whose lives are based on patriarchal backgrounds and who may see reproduction as the essence of being female.

As a result of biological determinism, it would seem that most patriarchal societies tend to relegate females to sheltered spheres and males to unrestricted spheres as discussed in greater detail below.

2.4.14 Public and private realms

According to Havelkova (2008), in patriarchal societies there are two realms, namely public and private realms. Havelkova (2008) explains that the public realm, in the context of gender studies, refers to environments that are enriching to an individual's socio-economic growth. These are, among others, education, business and politics. Havelkova (2008) adds that the private realm refers to the

environments that are socially constructed to limit people, especially females' development. An example of the private realm, among others, is domestic life.

Genderlinks (2010) points out that historically, especially in patriarchal societies, the private sphere was regarded as the females' proper place whilst the public sphere was reserved to be inhabited by males. Apparently, the universal saying "a woman's place is in the kitchen" bears evidence to this. Genderlinks (2010) further states that the traditional notion of public-private divide which locates politics in the public sphere and family and personal relationships in the private sphere as non-political, believed that sexual inequality is natural and not political. From the discussion above on private and public realms, it appears as if socially constructed realms are created to curb the progress of females whereby females are demoted to a sheltered and isolated realm and males are exalted to a superior realm. The public sphere is reserved for males while the private sphere is reserved for females.

The discussion above also points to females as being incapable of fulfilling leadership roles. Such perceptions, according to Dlodlo (2010), are mostly fuelled by gender stereotypes that are predominant in these communities. These gender stereotypes are discussed below.

2.4.15 Gender-role stereotyping

For the purposes of this study, and as mentioned in section 2.3(g), gender-role stereotyping is discussed further in this section within the context of how it relates to patriarchy. Gender stereotyping is defined by Papallia (2003) as certain understandings, within societies, that pre-conceive capabilities of males and females, and thereby assign roles as determined by those pre-conceived capabilities.

Johnson and Johnson (2010: 76) add to this argument by listing some common stereotypes that societies give to females: these are "inefficiency, cooperation, weak, sharing, compassion, caring and emotional expressiveness". According to these stereotypes, Chacko (2003) states that since females are seen as unskilled as compared to males, it is evident that society's view of gender advocates that males should have the power.

According to Sipofana (2013), from such gender-role stereotypes taught through informal and formal techniques of socialization, young children are brought up in patriarchal societies where they learn that males are rational, strong and intelligent and that these are the traits a leader must embody. Sipofana (2013) goes on to say that children also learn that, in contrast, females are emotional, fragile and intuitive, and the latter traits are not suited for leadership roles. Therefore, Sipofana (2013: 55) argues that if a female wants to become a leader and wants her voice to be respected and heard, she must take on “masculine” traits at great risk to her femininity and marriageability; at the same time, if a male embodies the “feminine” qualities of being emotional, fragile and intuitive, he is seen as less than a male and inherently unworthy of respect.

More universal examples of gender-role stereotypes are: *boys don't cry* and *good girls sit with their knees together*. According to Manning (2010: 67), the idea of the latter stereotype of being “ladylike” is to take up as little space as possible, while males are encouraged to show their physical abilities by taking up as much space as possible. Manning (2010) argues that not only does this reinforce the sexist public/private dichotomy, but it may also lead to low self-esteem and eating disorders amongst female learners.

Manning (2010) adds that what adults tell children about their capabilities and limitations has a profound impact on each individual child; if a child grows up being told s/he can do and be whatever s/he wants, that child will usually believe it, whether or not success is to follow. Xaba (2009) adds that both male learners and female learners in various communities are socialized through various activities such as games, sports and their appearances, and this builds up to a culmination of socialization regarding their education and career choices.

According to Ntusi-Mpako (2011), in the Xhosa cultural experience, especially in the rural areas such as the ones where part of this study is conducted, most of the socialization processes are through chores that female and male children perform. Ntusi-Mpako (2011) explains that boys are expected to look after the livestock while female children are expected to perform nurturing tasks such as collecting firewood and fetching water, cooking, collecting cow-dung for cleaning the house and plating hair. Nyamende (2012) adds to this narrative that with

regards to games in the rural Xhosa culture, socialization is done through the different toys that girls and boys build or create for themselves. Nyamende (2012) provides examples of male children going to the forest to look for the best sticks for a stick fight and making cars from wires; Nyamende (2012) also provides examples of female children making dolls from cloths and creating clay pots. According to Nyamende's (2012) explanation, those who show outstanding talent in building such toys are called the skilled ones (*amachule*), and this feedback is regarded as a high accolade in the Xhosa communities.

From the above discussion on gender stereotypes within its relation to patriarchy, it would seem that society influences female and male children towards gender stereotyping at an early age. In addition, children are socialized to hold perceptions against the other gender from an early age through subtle influences that come through societal expectations.

Although such expectations appear as developmental, games and sports are used to socialize children into gender-specific roles which are reinforced through positive feedback. Lastly, gender stereotypes promote notions of male superiority and female subordination such as males always being in control and females being often seen as fragile.

Patriarchy is discussed extensively above under various sub-sections as an important overarching concept that feeds off gender in this study. From the above discussion, the overall understanding regarding patriarchy is that:

- patriarchy is a powerfully embraced philosophy that becomes promoted through various vehicles such as schools;
- through patriarchy, conformity with cultural definitions of behaviour obligations associated with masculine and feminine roles is promoted; and
- individuals acquire ways of thinking, feeling, and acting characteristic of such masculine and feminine roles through their social experiences, most notably enculturation practices such as female subordination passed on across and within generations.

Furthermore, it seems as if patriarchy is a system of unequal power relations which views males as superior to females and imposes male and female stereotypes. Such stereotypes keep females in subservient positions and promotes discrimination against females through unequal treatment in terms of basic rights to education and employment.

From the Xhosa bride education ceremony discussed above, it appears as if the Xhosa bride is conditioned to idolize the husband and is meant to accept the husband as her owner and controller. This type of dominance is what feminists believe should be changed in patriarchal societies (Mabovula, 2004). According to radical feminism, females have historically been disadvantaged in society due to their biological make-up and males continue to abuse their power over females (Weiner, 1994).

Various feminist theories relate to the above arguments put forward on patriarchy, and below is a discussion of lessons learnt from the above discussion on patriarchy and their implications for this study:

The first lesson learnt is that a subtle social contract between female and males espoused by social feminism is one which, although challenged, remains arguably at the core of patriarchal societies (Enns & Sinacore, 2005). As evident in the discussion on patriarchy above, such a social contract seems to be built into communities, schools, and family life. Social feminists argue that the power which this contract gives males over females is dichotomously the target of and the constraint on gender reform (*ibid*). What this implies in this study is that the afore-mentioned social contract may feed the gender perceptions carried over to schools by teachers and learners.

Another lesson learnt from the discussion on patriarchy above is that, based on liberalist feminism, the struggle by females to access education as a social right and access to policy-making as a civic right, still remains problematic in patriarchal societies as discussed above (Polit & Beck, 2012). Such a struggle is so intensified that the inevitability of male domination becomes acceptable and moulds gender perceptions of both males and females (Manning, 2010). Liberal feminism, however, seems satisfied with females gaining access to male structures rather than reforming these internal gender structures (Arnot, 2003).

This satisfaction is problematic because, even though female learners are often thought to be the most adaptable learners, not all female learners are equal (*ibid*); this is where postmodernist and post-structuralist feminism become influential in the quest for females to be recognised as individuals, as espoused by Sinacore and Enns (2005).

Moreover, Marxist feminist theories point out that ingrained patriarchal gender perceptions discussed above are evident in the way in which male power relations have been sustained within the labour market despite educational transformations (Weiner, 1994). It is seen as relevant for this study to review gender perceptions of teachers and how these may have influence on academic success of female learners in e-learning, which might, in turn, affect them in the labour market such as Information Technology. Marxist feminist theories also point to the limited power of education to change male dominance and hierarchy in the labour market and the sex-based segregation of the labour force (*ibid*). In this study, patriarchal gender perceptions possibly influence vocational choices of female learners to gravitate away from historically male careers such as technology. According to Mabovula (2004), elite institutions such as universities and professional training centre have been challenged by feminist scholarship in entrenching patriarchal values with regards to Mathematics, Science and Technology but this has led often to retrenchment of those feminist academics who protest against this practice.

Challenges of females, such as retrenchment, mentioned above, have been the concern of socialist feminist movements which reject patriarchy in favour of creating conditions for greater social development of working-class females and their children (Manning, 2010). In the discussion of patriarchy in this chapter, it is of interest to the researcher to refer to such movements in order to examine the plight of females in patriarchal societies whose social development appears to be doomed.

Lastly, postmodern and post-structuralist feminism add to the debate against patriarchy by arguing for females' understanding of their agency, capabilities and power not as a collective but as individuals who are capable of deliberating within the scope of situated learning (Walkerdine, 2006). Such agency in this

study would be in the form of awareness of gender perceptions in teachers, how these may be influential in negatively affecting female learners' success in e-learning, and how such effect may be addressed. In addition, the aforementioned feminist theories point out that the forms of knowledge and of schooling would need to encourage positive female representation and female agency in order to encourage female learners' success in Science, Mathematics and Technology (Walkerdine, 2006).

All in all, the identified common argument of feminist theories is that gender perceptions which encourage male dominance affect females and female learners' diligence and academic success negatively (*ibid*).

According to Manning (2010), although patriarchy exists in societies, it is driven through various structures, among others, family, schools, and churches. Xaba (2009) adds that these structures mostly drive patriarchy through the process of *socialization*, which plays a big role in gender construction as discussed below.

2.5 Socialization as a major determinant of gender construction

Postmodernist feminism, according to Nash (2000) socialization and social constructions of gender are to be understood by all who want to challenge patriarchy and gender stereotypes. In this study, it is, therefore, important to examine whether socialization does influence gender perceptions of the teachers, in what way, and what the theoretical frameworks of this study suggest as measures of change. This is because emancipation, for Freire (1989), begins with the recognition of a system of oppressive relations, and one's own place in that system. Socialization is defined by sociologists such as Meeker (2009) as the process whereby an individual learns to adapt to a group or society and behave in a manner that is accepted by the group or society. Socialization is also defined by Dlodlo (2010) as a continuing process whereby an individual acquires a personal identity and learns the norms, values, behaviour, and social skills appropriate to his or her social position. According to Mabovula (2010), power and hierarchy underlie social construction; social construction is a dynamic process, and social constructionists emphasize the complexity of how knowledge is created in social interactions.

From the above discussion, it appears as if socialization is a process through which personality identity is acquired and is a process whereby a human being acquires his/her personal identity.

The section below expands on the issue of socialization as a process.

2.5.1 Socialization as a process

Throughout the individual's growth, there exists a process of socialization. According to Hammond (2009), children are born as free agents and become socialized shortly after birth. Hammond (2009) further maintains that early childhood is the period of the most intense and the most crucial socialization because it is then that people acquire language and learn the fundamentals of their culture. Furthermore, Hammond (2009) is of the opinion that early childhood is also a period when much of people's personalities take shape. Seidner (2009) takes this argument further by pointing out that people continue to be socialized throughout their lives and, as they age, they enter new statuses and learn the newer appropriate roles for them. Seidner (2009) also argues that people also have experiences that teach them lessons that potentially lead them to alter their expectations, beliefs, and personalities. Seidner (2009) gives an example of a female whose experience of being raped has the potential to develop, in that female, a personality that is distrustful of males.

Socialization, as a process, occurs globally (Taylor, 2006). According to Taylor (2006), around the world different cultures use different techniques to socialize their children. Taylor (2006) points out that there are two broad types such socialization techniques that the process of socialization uses, and these are the *formal* and *informal* techniques. Taylor (2006: 34) opines that the *formal technique* is what primarily happens in a classroom or any initiation school; it usually is structured, controlled, and directed primarily by adults or peers who are professional "knowers". Taylor (2006) explains further that in contrast, *informal* techniques can occur anywhere; they involve imitation of what others do and say as well as experimentation and repetitive practice of the newly acquired knowledge and skills. An example of an *informal* technique is when children role-play adult interactions in their games. Taylor (2006) insists that the

formal and informal techniques of socialization are implemented by *agents of socialization*, and these are discussed in greater detail in the section that follows.

According to the discussion on socialization above, it appears that socialization is not a static, but an ongoing process that occurs throughout individuals' lives in societies. In addition, through socialization, both males and females are directly and indirectly taught.

2.5.2 Agents of socialization

There are multiple agents of socialization, however, for the purposes of this study, the researcher focuses on the following agents: family, religion, culture, and language as these are integral and relevant to this study. The reason for inclusion of agents of socialization in this chapter was that the researcher wanted to determine the role played by each one these agents in influencing the teachers' gender perceptions. In addition, critical educators such McLaren (2007) highlight the influence of many institutions and social structures in developing gendered perceptions that are transferred from these institutions to schools by teachers and even learners. It is therefore important to know how much of the teachers' gender perceptions (and learners') stem from their homes.

2.5.2.1 The family as an agent of socialization

According to the Changing Tapestry Report (2006), the most important agent is the family since it is the first point of contact for every individual and therefore very influential. The Changing Tapestry Report (2006) goes on to say that the individual's initial socialization is based on how the home is entrenched in, among others, culture and beliefs. In addition, according to Manning (2010), the home contributes to the individual's language acquisition, rituals, behaviour and forming of relationships, and the first lessons of patriarchy are learnt in the family where the head of the family is a male or the father. Xaba (2009) adds that the male is considered the head of the family and controls females' sexuality, labour or production, reproduction and mobility.

Mndende *et al.* (2008) explains that in some homes where the mother is a single parent, patriarchy is enforced through male relatives, or even through the mother who has embraced patriarchal ideologies. Mndende *et al.* (2008) proceeds to say that in a patriarchal family, the birth of a male child is preferred to that of a female child; the former is considered as the heir of the family, while the latter is considered as a temporary member of the family who will get married and leave. According to Lerner (2010), family plays an important role in creating a hierarchical system as it not only mirrors the order in the state and educates its children, but also creates and constantly reinforces that order. Family is therefore important for socializing the next generation in patriarchal values. Lerner (2010) further adds that as a result of this family intervention, males learn to be controlling and aggressive, and females learn to be nurturing, loving, and compliant. These stereotypes of masculinity and femininity are not only social constructs, but seem to also have been internalized by both males and females.

In a patriarchal society, while the pressure to earn and look after the family is more on the male, it would seem that the females are expected to do unskilled jobs and take care of their children and even other members of the family. Dlodlo (2010) asserts that it is because of these gender stereotypes that females are at a disadvantage and are vulnerable to violence and other types of discrimination and injustices. The Mail & Guardian (2013) sums up these injustices as systemic deprivation and violence against females which is: *rape, sexual harassment, sexual abuse, female foeticide, infanticide, witch-killing, wife-beating, high level of female illiteracy, malnutrition undernourishment* and continued sense of *insecurity* that keeps females bound to the home, economically exploited, socially suppressed and politically passive. In view of such patriarchy-perpetuated violence against females, radical feminists believe patriarchy will only end when females are freed from the physical and emotional violence inflicted by males in societal institutions such as homes, schools, churches and public places (Xaba, 2009).

According to Lerner (2010), in a patriarchal home, parents often lack awareness of the benefits of education and training for female learners. Mabovula (2010) asserts that in most rural areas, what seems important for parents is for the

daughters to get married so that the family can receive the bride-price (*lobola*) to elevate the financial status of the family. According to Mabovula (2010), it is at the puberty stage that families arrange marriages for their daughters, with the resultant dropping out of school by the daughters. Mabovula (2010) further argues that what these families seem to miss out on is the fact that educating their daughter could have long-term economic benefits for the family versus the short term benefits from the *lobola* (bride-price). In support of Mabovula's argument, Xaba (2009) calls for parents to develop a positive attitude towards education for their daughters as it is a good investment for their daughters' and the family's development.

According to Sipofana (2013), the traditional Xhosa family was and still is mostly patriarchal especially in the rural areas; males are still considered the heads of their households, and females and children are expected to defer to male authority. Sipofana (2013) further explains that polygamous marriages (marriages with multiple wives) are still permitted in cases where the husband has the means to pay the *lobola* (bride-price) for each wife and to maintain them properly. According to the South African Customary law (1998), the first wife can be married in court, and the additional wives can be married traditionally. According to Mndende *et al.* (2008), traditionally, newly married females are sometimes expected to leave their families to live with their husband's family in traditional families. According to Phofolo (2007), such expectations have a history of prevalence during period when the migrant labour system was common in South Africa. Phofolo (2007) adds that in such cases where males had to leave their rural homes to work in the mines, those males mostly established two distinct families; they would have a female whom they cohabited with at the urban areas where they worked, and their wives would be expected to stay with the husband's family in the rural areas.

From the discussion above, it would seem that as an agent of socialization, the family is a very influential in a patriarchal system which views the female child as a "temporary member" to be married to another family. This may contribute to the female child dropping out of school because some families often lack awareness about the benefits of education for the female child.

Furthermore, in the context of this study, it is understood that the Xhosa family background, where both the teachers and learners in this study are from, are mostly patriarchal, especially in the traditionally rural areas, and accept polygamous marriages, and expect females and children to defer to authority.

For the purposes of this study, it is vital to discuss in further detail black African family relationships with their children as done below:

According to psychologists Becvar and Becvar (2006), good relations between parents and children are the cornerstone of a successful and well-rounded individual. According to the National Child Traumatic Stress Network (NCTSN) (1995), parents who feel powerless are more likely to be hyper-vigilant with a child and to focus on the negative, engage in coercive and punitive parenting, misread neutral child cues as malevolent and derogate a child in an effort to restore power.

A study was conducted by Mojapelo-Batka *et al.* (2007) on how South African black families relate to their adolescents. The findings of this study were that conflict in black families was more common than in other population groups. In another study by James, Reddy and Jinabha (2004), cited in Ralphe (2011), it was further reported that there is decline in many relational qualities between parents and adolescents in many South African black families. Some other researched perspectives on the communication between parents and adolescents in African cultures come from research on sexual education practices. De Visser and Le Roux (1996) and Kelly (1988) found black parent-adolescent interactions relating to sexual issues lacking, and fathers, in particular, were found to be lacking in the sexual education of their children.

James, Reddy and Jinabha (2004) cited in Ralphe (2011) also reported findings of poor communication and lack of supportive relationships that feature between black parents and youth, but further indicated that adolescent female learners reported higher levels of discontent with their parents, mainly due to the power-assertion through criticism, verbal punishment and quarrelling that they experienced from parents. Matenda (2006) found significant differences between African male and female adolescents on aspects of the parent-adolescent relationship such as attachment, communication and satisfaction

with family life. The female learners showed significantly less experience of constructive relational features and more experience of relation tensions such as attachment-anger, attachment-alienation and problematic communication experience.

Matenda's (2006) research echoes research done by Eaton, Flisher and Aar (2003) (cited in Xaba, 2009) on gender issues in African communities which indicates that females often experience oppression, bullying and violence in their relationships. According to Airhihenbuwa (2005), these negative experiences by females may be a result of the fact that traditional African cultures are often patriarchal and tyrannize females. According to Jewkes and Abrahams (2002), most South African black female youths' lives are specifically framed within patriarchal conventions and practices. Motsemme (2007) and Nolen-Hoeksema and Rusting (2009) agree on the point that black females mostly come from families where they are often controlled by males and are frequently discriminated against; traditional, cultural and gender stereotypes play a role as females are sometimes regarded as perpetually subordinate to males. Wood (2001) therefore posits that in the process of becoming socialized, these gendered identities are reinforced in family and social lives until they shape the female's very understanding of her culture and her own places, opportunities, and priorities within this culture.

Below is a summary of findings from a study conducted by Matenda (2006) on how Xhosa adolescents perceive their relationships with their parents, and how these impacted on their personal and academic growth.

Participants indicated they felt their parents want to stick to traditions and old ways and do not want to accept that times have changed. Female participants indicated that they do not have a say because in the Xhosa culture children only speak when spoken to and are not allowed to have a say in any discussion in the home. In addition, the issue of poor communication between female children and their male siblings and fathers was raised, and this was linked to female children reporting that they were not treated with respect by the parents and siblings. Lastly, there was lack of compassion from the parents reported by the female adolescents.

As a result of the negative relationships reported above between Xhosa parents and adolescents, Matenda's (2006) female respondents reported that they lacked concentration at school, bottled up emotions, and showed defiant behaviour such as drinking and smoking and had poor self-esteem.

From the above discussion, it is understood that African black parent/adolescent relationships are riddled with conflict due to miscommunication, inflexibility and lack of empathy. Female children are the worst affected as they do not receive as much attention as their male siblings.

The discussion above on Matenda's (2006) research reflects the impact that families, as agents of socialization, have on the Xhosa female adolescents as the focus of this study. In view of this study's research questions, if the teachers participating in this study are from such families as discussed above, what gender perceptions would they hold? and how would these gender perceptions transfer to the way in which they relate to their female learners in the e-learning classroom? Religion as an agent of socialization is discussed next.

2.5.2.2 Religion as an agent of socialization

Inclusion of religion as an agent of socialization in this chapter was motivated by Mndende *et al.*'s (2008) explanation of the pivotal role religion plays in individuals from traditional rural and semi-rural environments, which is where this study is based. The point was to determine the role of religion in influencing gender perceptions of the teachers and how these possibly affect female learners' proficiency in e-learning. The Oxford dictionary (2007) defines religion as the belief in and worship of a superhuman controlling power, especially a personal God or gods. In the African context, specifically the Xhosa culture, Mndende *et al.* (2008) explains that religion is not only seen in terms of the Western churches, but also in terms of the practice of worshipping the ancestors (*ukunqula izinyaya*). Therefore, the discussion of religion in this section also encompasses traditional Xhosa religious practices.

Peires (2010) argues that the practice of worshipping ancestors in the Xhosa culture gives patriarchy unquestioned status because it is linked to the dead who are held in high esteem within cultural practices. For example, according to

Ntuli (2011), in traditional African communities there exists a dialect called respect (*Ukuhlonipha*), directly translated as giving respect. A female is taught how to speak to her in-laws using this dialect. This dialect, according to Ntuli (2011), is based on the belief that you should not ever call your in-laws by name; this also extends to deceased males of the household who have become ancestors. Ntuli (2011) gives an example of the execution of this dialect thus: if the bride's father-in-law's name was *mouth (mlomo)*, all the females who become wives of the house should use the alternative word for *mouth*.

This rule also applies to syllables within a word; therefore if the father in law's name begins with the syllable 'tsh', the wives are required to substitute these syllables with other syllables. This means that if they want to say the word *tshotsha* (dance), for example, they would say something like *xhentsa* (dance), depending on that village's dialectical rules. This is seen as respecting both the living and the dead (ancestors).

Most religions practiced in African communities endorse patriarchal values through various ways. According to Mbhele (2011), the first endorsement was when patriarchy was established as an ideology wherein females, through socialization, had to live up to the ideal notion of womanhood constructed by the ideologies of the society. Mbhele (2011) further asserts that the Supreme Being, among the Xhosa, is called God (*Thixo* or *Qamata*); God may be approached through ancestral intermediaries who are honoured through ritual sacrifices, and these ancestors commonly make their wishes known to the living through dreams. Mbhele (2011) also explains that Xhosa religious practice is distinguished by elaborate and lengthy rituals, initiations, and feasts.

In terms of Christian religion, Palm-Forster (2000) points out that the Bible, through various verses, is believed to play a role in promoting socialization through gender. According to Palm-Forster (2000), there are various contradictions within how societies refer to the Bible to support gender discrimination against females. The above author points out that various parts of the Bible actually promote equality between females and males for the purpose of growth within societies. She cites Genesis 1:38 wherein females and males were instructed *together* to bring the earth under their control and to have

children. Niemann (1994) cited in Palm-Forster (2000) argues that this misinterpretation of the Bible by patriarchs paints a warped picture of a female being the subordinate in the church. As a concluding statement, Greyvenstein (1989) cited in Palm-Forster (2000) makes the following observations:

Gender inequity may, apart from the influence of complex and eclectic cultural factors, be associated with the influence of religious thought, as interpretations of the Old and New Testament have been ample and contradicting, and have exerted a powerful influence on gender-related philosophies (p.22).

The researcher cites the following passages that are often described by various authors such as Mavusi (2010) and Mbhele (2011) as demeaning to females:

- *Genesis 2:18 The Lord God said, "It is not good for the man to be alone. I will make a helper suitable for him;"*
- *1 Corinthians 11:3: Now I want you to realize that the head of every man is Christ, and the head of the woman is man, and the head of Christ is God;*
- *Ephesians 5:22: Wives, submit to your husbands as to the Lord;*
- *1 Timothy 2:12: I do not permit a woman to teach or to have authority over a man; she must be silent.*

From the discussion on religion as an agent of socialization above, it appears as if religion is multifaceted in the Xhosa culture and Christian or ancestral worship may be practiced, and most religious communities endorse patriarchal values.

2.5.2.3 Culture as an agent of socialization

In this study, it was important for the researcher to delve deep into a discussion on culture for various reasons. Firstly, in rural and semi-rural areas where this study is based, culture forms a very big part of the day-to-day existence of its individuals (Lamla, 2000). For example, during the visits to schools, the researcher experienced some of this importance of culture when she was constantly asked for her clan name. It seemed as if participants had a need to place one culturally as a basis of proceeding with any communication that might take place. Secondly, during the school visits, the researcher noticed that a number of learners were absent. Explanations given would be that the boys or

girls are attending initiation schools. In a few cases, the researcher would be told the learner(s) has/have gone to undertake one ritual or another. In view of this importance of culture to the communities where the schools were located, it became vital to examine the extent of cultures' influence on teachers' (and learners') gender perceptions.

Thirdly, the addition of a cultural dimension in this study is explicable because the majority of African people, in their nature, see life realities through their cultural lenses (Engelbrecht, 2004; Kang'ethe & Nomngcoyiya, 2014). It is anticipated that this inclusion of culture will encourage communities of practice and other readers to understand this study's participants' social and cultural context and how different underpinnings of culture affect people's thoughts, feelings, attitudes, behaviour and belief systems (Whissom, 2000; Peplau & Taylor, 1997). For this study, such an exploration of culture adds to a deeper understanding of teachers' gender perceptions and how these possibly affect the e-learning proficiency of female learners.

According to critical pedagogy, communities are very influential in the culture adopted by their schools (Ralphe, 2011). This author adds that critical pedagogy often raises questions about inequalities of power shown in communities which translate to schools through various social practices such as religion and culture. Manning (2010) argues that in some cases the false myths of communities' belief systems and culture become internalized to the point where learners and teachers believe that there are no alternatives besides the lives that they are used to. Formal and informal cultural expectations of the role of females in society are viewed as problematic by critical theorists of pedagogy (Ralphe, 2011).

According to liberal feminists, socio-cultural perceptions regarding the role of females in society play a central role in prohibiting female participation in schools, especially those in patriarchal societies (Nash, 2000).

Culture, according to Lamla (2000), refers to the cumulative deposit of: knowledge, experience, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, spatial relations, concepts of the universe, material objects and possessions acquired by a group of people in the course of

generations. According to Omohunduro (2011), human infants are born without any culture. Omohunduro (2011) also states that human infants are transformed by their parents, teachers, and others into cultural and socially adept animals. Seidner (2009) describes the process of acquiring culture as socialization and maintains that, during socialization, people learn the language of the culture they are born into as well as the roles they are to play in life.

Seidner (2009) supports the above assertion by saying, for instance, female children learn how to be daughters, sisters, friends, wives, and mothers. In addition, Seidner (2009) further maintains that, through such cultural socialization, girls learn about the occupational roles that their society has in store for them.

Omohunduro (2011) adds to the assertion that people learn and usually adopt their culture's norms through the socialization process. Omohunduro (2011) explains that this adoption sometimes fits within the concept of norms which are understood as the conceptions of appropriate and expected behaviour that are held by societies. While socialization refers to the general process of acquiring culture, anthropologists such as Haviland, Harald, Walrath and McBride (2009) use the term *enculturation* to explain the process of being socialized to a particular culture.

In view of the discussion above, socialist feminism, according to Mlemwa (2004), highlights the processes of cultural and social reproduction of gender and social class relations, such as working class girls' domestically oriented education and their subordination through domestic and low status badly paid work and through the cult of femininity and romance.

The section below discusses the cultural practices of the Xhosa ethnic group since the study participants are Xhosa. The Oxford dictionary (2007) defines amaXhosa as a Bantu ethnic group of Southern Africa living predominantly in south-east South Africa in a province known as the Eastern Cape. The Stats S.A. Report (2012) shows that Xhosa-speaking people are divided into a number of subgroups such as the Bhaca, Bomvana, Mfengu, Mpondo, Mpondomise, Xesibe, and Thembu. Unless otherwise stated, this study refers to all the participants as Xhosa. The following discussion on culture as an agent of

socialization focuses on such aspects as belief systems, customs and rituals that point to socialization's impacts on gender.

According to Wood (2001: 35), there is an extensive link between culture and gender and, as stated earlier in this chapter, "gender is neither innate nor stable; this link is acquired through interaction in a social world, and it changes over time". Wood (2001) also asserts that gender relies heavily on culture and cultural practices. Wood (2001) further explains that the aforementioned is because society determines the position regarding what is considered acceptable behaviour, and what the expectations are of its male and female members.

These expectations, in turn, grow out of the collective values and beliefs of that society. In other words, according to Taylor (2006), a culture shapes and upholds meanings of gender by advancing biological sex with social significance. Thus, gender can be seen as a social, meaningful system through which a culture attaches importance to biological sex. As mentioned before in this chapter, gender is something individuals learn, yet because it is constructed by culture, it is more than an individual quality. Instead, according Wood (2001), gender is a complete system of social implications that stipulate what is associated with males and females in a given society at a particular time.

According to Mugambe (2006), a culture can be a force of liberation or oppression. Mugambe (2006) also points out that male-dominated ideologies in Africa have tended to justify oppressive gender-relations through culture. Magwaza (2008) contends that black African males appropriate and interpret African traditions and culture in selective ways so as to entrench their power and authority. Interviews held with black African Xhosa males by Bhana *et al.* (2009) indicated that Xhosa males are raised in a way which places females as being always under, and the males always above. According to Bhana *et al.* (2009), these attitudes are still upheld and are part of the cultural make-up and understanding of gender in most of their communities. The cultural context therefore plays a major role in how both males and females are socialized in the Xhosa culture as discussed below.

Bhana *et al.* (2009) posit that cultural practices can be so deeply entrenched that they pervade the daily existence of people, creating the illusion that they are natural, normal ways for females and males to be, and thus making change extremely difficult. To explain this further, Wood (2001: 21) asserts that gender roles are so deeply acculturated in societies that they become “internally part of whom we are”, and at a very young age, female and male children understand and accept their roles in a given society as defined by their culture. Brice and Heath (2008) also assert that female children are required to take pride in these roles even though the roles are unequal to those of boys because role allocation is culturally determined and not open to debate.

According to Magwaza (2008), most black African culture is not written down, but is passed on from generation to generation, usually through communal social activities and folklore. This un-codified character of culture makes it susceptible to abuse and misinterpretation.

There are many components of culture; however, for the purposes of this study, components of culture that are discussed below are the Xhosa belief systems and Xhosa customs.

2.5.2.3 (a) Belief systems in the Xhosa culture

At the centre of the Xhosa belief system is the concept of respect (*ukuhlonipha*). Raum (1973) (cited in Peires, 2010), who conducted a comprehensive study of the belief systems and customs in Zulu and Xhosa societies, distinguishes the respect (*hlonipha*) of speech from the respect (*hlonipha*) of action. The former, also termed *isiHlonipho* (respect), primarily includes the avoidance of certain names and syllables but also comprises, in its traditional form, an entire lexicon of specific respect (*hlonipha*) terms. The respect (*hlonipha*) of action involves the avoidance of any kind of behaviour which could be considered disrespectful. According to Peires (2007), while it is primarily married females who face and are expected to uphold the most restricting forms of respect (*hlonipha*), the custom itself is neither restricted to females, nor is it a male-exclusive practice *per se*. Raum (1973) (cited in Peires, 2010) explains that respect (*hlonipha*) can manifest itself in many different relations of sub-ordination and is essentially

based on systems that control posture, gesture, movements, dress code, and other dynamics of a material nature or status.

Rudwick and Shange (2006) explain that the belief in ancestors (*izinyanya*) plays an important part in respect (*hlonipha*) and, as such, is understood as more than merely traditional codes of behaviour, but rather as a kind of spiritual conviction. Rudwick and Shange (2006) add that it is in particular the spiritual value of respect (*hlonipha*) that creates a 'moral obligation' amongst many isiXhosa speakers. From a gender studies perspective, respect (*hlonipha*) seems to embody ambiguities such as those recorded in Thetela's (2002) analysis of transcripts of police interviews of rape victims. These recordings demonstrate that the respect (*hlonipha*) behaviour among Xhosa females regarding 'sex-talk' potentially contributes to the gender bias in the legal system. To be specific, according to Manning (2010), females that are newly married in the Xhosa culture are not allowed to use the names 'vagina' and 'penis', and this may extend to other body parts as well; these females are also not allowed to call their in-laws, specifically the male ones, by their names.

Similarly, Dowling (1988) argues that respect (*hlonipha*) relegates females to an inferior position in society. As per Mndende *et al.*'s (2008) explanation, in traditional Xhosa societies and many contemporary Xhosa households, it is primarily the young, newly married wife who is required to demonstrate respect (*hlonipha*) and deferential behaviour towards her husband and her husband's family. This respect includes a certain dress code, submissive posture, the avoidance of calling the names of the relatives, and many subtle linguistic and social patterns of behaviour that are an indication of an inferior position of the female in that society.

Thetela (2002) discusses how unequal access by females to sex discourses, due to the respect (*hlonipha*) custom, constrains their testimonies and ultimately serves to maintain the dominant patriarchal hegemony in place in the socio-legal system. Thetela (2002) mentions that in a situation where a female has been sexually violated by a male in-law, she is not in a position to mention his name, nor write a statement that provides accurate details of the violation. Similarly in rural schools, according to Mahali (2007), since most Guidance teachers are

female, their observation of respect (*hlonipha*) restricts their teaching of anatomical reference to genitalia. Mahali (2007) cites her findings where one teacher kept on constantly referring to the penis as a *smoking pipe (inqawa)* in her class; these substitute names are thereby adopted by the learners who become uncomfortable to use the actual names of body parts.

The discussion on belief systems above seems to suggest that in the Xhosa culture, females are expected to demonstrate respect for their in-laws and husband through respect (*hlonipha*) which limits the ability of Xhosa females to communicate.

2.5.2.3(b) Customs and rituals as the second component of culture

According to the Blackwell Encyclopaedia of Sociology (2009), a ritual is a sequence of activities involving gestures, words, and objects, performed in a sequestered place, and performed according to set sequence. Peires (2010) states that there are many customs and rituals practiced by the Xhosa. For purposes of this study, the Xhosa rituals that are discussed are centred on gender issues as per the focus of this study. Rituals to be discussed under this section are the male initiation, female initiation, female stretching of genitals, virginity testing, cutting off of the finger, and controversial marriage rituals.

▪ Ritual 1: The male initiation

Male initiation is an important and deeply-rooted custom of various ethnic groups in South Africa, especially of the Xhosa. According to Mtuze (2008), the male initiation ceremony serves as a doorway through which the Xhosa adolescent male must step in order to become a respected member of society, or, as it is called among the Xhosa, 'to attain manhood'. Mtuze (2008) adds that obtaining this status bestows rights, privileges, and obligations on the male concerned. Peires (2010) explains that the initiates (*abakhweta*) live in special huts isolated from villages or towns for several weeks, and these initiates are expected to observe numerous taboos (prohibitions).

As mentioned above, for the Xhosa boy, it is initiation which serves as a passport towards acceptance and respect in his community. Mndende *et al.*

(2008) reports that an uninitiated male becomes an object of ridicule and further explains that an uncircumcised boy is regarded as unclean, and as a person of no significance. Phofolo (2007) adds that in the event that an uncircumcised male marries, his marriage will remain stigmatised.

According to Mndende *et al.* (2008), there is a lot of secrecy regarding what actually happens in the initiation school, and this creates an air of controversy around this practice. In March 2007, a controversial mini-series dealing with Xhosa circumcision and initiation rites debuted on the South African Broadcasting Corporation (SABC). Titled 'The Mountain Shade' (*Umthunzi Wentaba*), the series was taken off the air after complaints by traditional leaders that the rites are secret and not to be revealed to non-initiates and females. The observation of Manning (2010) regarding such secrecy is that it typifies patriarchal society practices of divisions executed between males and females. Manning (2010) also argues that such secrecy regarding what happens in initiation school can be blamed for much of the controversy regarding deaths in the initiation schools.

Currently, the practice of male circumcision has been heavily debated in the media. According to the Eastern Cape Department of Health Report (2011), there have been over 825 circumcision and initiation-related deaths since 1994, together with the spread of sexually transmitted diseases, including HIV via the practice of circumcising initiates with the same blade. According to Xaba (2009), the issue of sexually transmitted diseases by the initiates to their girlfriends is one of highly debated issues regarding females not having enough power to negotiate issues of safe sex with their partners.

Meintjes (1998) asserts that for the initiates the specific prescriptions with regard to: clothes, food and movement are coupled with ritual washing, shaving and the smearing of the body with special white clay, circumcision, the slaughter of animals, physical challenges, ordeals, and the learning of a dialect of Xhosa or bush language known as respect (*hlonipha*). Bongela (2001) explains the application of respect (*hlonipha*) in the male circumcision ritual thus: according to Xhosa tradition, there is power in the spoken word or in certain behaviours; respect (*hlonipha*) carries the meaning of avoiding certain behaviour or saying

something that might offend certain people or spiritual entities. This means that, as per Bongela's (2001) explanation, a verbal act such as calling out someone's name may expose the initiate to magic or witchcraft; therefore, Xhosa initiates are in seclusion and are, therefore, not referred to by their usual names, but are called initiates (*abakhwetha*) to protect them.

Ncanca (2013: 33) adds that this custom was expanded to include a special vocabulary for the food the initiates eat, objects around them, and eventually developed into a "language of avoidance". Newly circumcised male learners wear brown clothes to school. For the most part, they are much respected and may even show arrogance, according to Mndende *et al.* (2008). Maholwana-Sotashe (2007) adds to this opinion that such male learners are very problematic at school and are mostly disrespectful to female teachers and learners. An example of the respect (*hlonipha*) word that the initiates (*abakhwetha*) learn in the initiation school is calling a female a derogatory name *isigqwathe* (snot or dried mucus).

Xaba (2009) explains that the initiates (*abakhwetha*) are very popular with female learners due to their elevated status as males. There exists a belief that, according to Xaba (2009: 32), the first girl that a new initiate has sexual intercourse with becomes unlikeable (*izothe*) in the society because the first semen following the circumcision is not "clean". Due to this, Xaba (2009: 32) explains further, the new initiates mostly choose to have casual sexual intercourse for the first few weeks, and only when they are convinced that the semen is "clean" do they have sexual intercourse with the steady girlfriend. Peires (2007) adds that in rural Xhosa culture, the steady girlfriend accepts this casual sex of the partner unquestioningly as she believes that the boyfriend is doing this to protect her from being unlikeable (*unezothe*).

It could be within such incidences as discussed above that cultural-radical feminists, according to Arnot (2003), view sex and penetration as male dominated and see a link between sex, female subordination, pornography, rape and abuse. However, an opposing view is that reproduction is the source of power for females. According to Xaba (2009), most females believe that males are jealous of females, and that they try to control reproduction through means

of technology such as artificial insemination. Regardless of the opposing views, the teachers and learners in this research are born and bred in rural and semi-rural environments which are highly steeped in cultural practices, and this is the reason for exploring culture as an agent of social construction.

From the discussion on the male initiation ceremony, it is understood that there is an elevation of social status for the new initiates, and the initiates are seen as a very important part of the community wherein females are socialized to accept the male initiate partners' casual sex.

The discussion regarding the relationships between Xhosa male learners and female learners seems to indicate that initiates seem to be so highly regarded that there seems to be constant acceptance of their behaviour, regardless of whether it is harmful or not.

Having discussed the male initiation ceremony above, the discussion proceeds to female-based rituals below. There are various rituals that are practiced on and by females in patriarchal and traditional societies. Some of these are practiced within the female initiation ritual (virginity testing), and some are practiced outside of the female initial ritual (stretching of the female genitalia and finger cutting). These are discussed below.

- **Ritual 2: The female initiation**

Mbhele (2011) explains that the ritual of female initiation (*intonjane*) is considerably shorter than the male initiation ritual. There is no actual surgical operation, and the girl to be initiated (also called *intonjane*) is secluded for a period of about a week. Mbhele (2011) explains further that during this period, there are dances, and ritual sacrifices of animals, and the initiate is required to hide herself from view and observe food restrictions.

The female initiation ritual is, traditionally, a key to socialization of female adolescents into the Xhosa culture. According to Bam (2009), the female initiation ritual provides a space where female learners are taught how to, for example, behave like females and deal with menstruation and child-birth since it is taboo for Xhosa females to hold conversations on subjects such as sexuality

with their own parents. Mndende *et al.* (2008) explains that the female initiation ritual takes place in a secluded place where the girl-child stays alone in a temporary grass hut; she is kept company by other females during the day. Mndende *et al.* (2008) further explains that there might be more than one girl going through the initiation ceremony, and in that case these females share a hut and the food that is given to them.

Manning (2010) concedes that while such a practice does have the benefits of teaching the female learners life-skills, most of the content of the teachings is still biased towards giving pleasure to males. Manning (2010) cites an example of the teachings where the female initiates are taught to please a male sexually. In addition, the above author argues that there is a lot of emphasis on conception, child-rearing, and child birth, all of which put pressure on the female initiates to see their bodies as meant only for reproduction.

The female initiation, when examined from the lens of radical feminism, could be viewed as one of the worst types of female oppression. Radical feminists, according to Manning (2010), believe that the domination of females is the oldest and worst kind of oppression in the world. According to Keller (2003), they believe this because such oppression spans across the world oppressing females of different races, ethnicities, classes and cultures. The goal of radical feminists is to free both males and females from the rigid gender roles that society has imposed upon them. In this case of female initiation, the initiates are moulded into roles of sexually pleasing males (*ibid*).

In addition, Mabovula (2010) points out that part of the disadvantage of the female initiation ritual is that in certain villages female learners are taken out of school to be part of the female initiation ritual as soon as they begin their menstruation periods. Mabovula (2010) further asserts that following the female initiation ritual, most often, the female learners are not encouraged to go back to school because through the teachings of the female initiation ritual, they tend to see the next phase of their lives as being someone's wife. Brown (2005) supports Mabovula's (2010) point by arguing that following initiation female learners fail to see the value of education since being initiated suggests that they are ready to be married and start having children. Brown (2005) and Tiesen

(2006) thus agree that as a result of dropping out of school following the initiation ceremony, female learners often find themselves lacking in skills and become reliant on their spouses.

Another observation made by Tiesen (2006) regarding the female initiation school's disadvantages is that after the female initiation ritual ceremony, the parents of the female learners tend to increase the number of chores that the female learners have to perform since they are now training the female learners to be wives. The added responsibilities cause the female learners to have less time for schoolwork and may affect their school attendance. Tiesen (2006) therefore argues that a combination of the added responsibilities and the teachings of the female initiation ritual, in some cases, contribute to female learners dropping out of school.

On the other side of the coin, Vincent (2008) maintains that not all the teachings of the female initiation school are bad. Vincent (2008) makes an example of the instruction that the female learners are given about never sleeping with an uncircumcised male. The above author points out that, although this instruction is not given for biomedical reasons, it is highly beneficial as a means of reducing vulnerability to HIV infection since circumcision can decrease the prevalence of HIV. Vincent (2008) also points out that the initiation school teaches the female learners on how they should take care of themselves during menstruation. In the traditional Xhosa culture, according to Mndende *et al.* (2008), males will not marry a female who is not initiated as she is still considered not grown up. As a result of this, many females in the rural Xhosa villages which still practice the female initiation ritual prefer to go through the female initiation practice in order to increase their chances of marriage.

Below is discussion of the proceedings of the *Bhaca* initiation ceremony so as to provide an example of what actually transpires during this practice. The *Bhaca* is one of the sub-tribes of the Xhosas. The reason for the researcher's reference to the *Bhaca* initiation ceremony is that it is the only one that has been researched and documented in a manner that sheds light on the details of the female initiation ritual. The details below are documented in a research conducted on female initiation schools by Makaula (2010).

According to Makaula (2010), the *Bhaca-Mamtiseni* is an initiation school for Xhosa female learners between the ages of six until at least eighteen years of age. Unlike the male learners' initiation schools, female learners' initiation schools are open, and outsiders are allowed to observe the proceedings and sometimes be part of the teachings. This group of female learners is under the supervision of the older females, and there are no adults supervising the event.

Makaula (2010) explains that the content of the teachings for both schools concern the issue of womanhood (*ubuntombi*), which is the expected identity and behaviour of a girl in the Bhaca or any Xhosa society. Being a real woman (*Intombi- "nto"*) means being a real girl; the phrase 'real girl' (*nto*) comes with many expectations on how to be a socially accepted girl. This is an identity of a girl who is 'pure' and untouched by any male, a girl who makes her community and family proud through the way she conducts herself, and a girl who does her chores obediently, speaks softly, and walks in a dignified manner. Female learners, during the initiation process, learn more about the Bhaca and the Xhosa culture and ways to function well in the society and marriage.

The selection criteria of the initiation school according to their leader, cited in Makaula (2010), is that those female learners who can dance stand a better chance of being selected than those who cannot. In the initiation school, female learners also teach one another crafts, for example, how to decorate. This skill would be used to decorate young males' horses during the horse racing season as well as during Christmas.

Makaula (2010) explains that songs play a major role in initiation schools, and their lyrics are meant to be educational to the initiates. Songs are also used to teach female initiates about childbirth, unacceptability of divorce, and pleasing males.

From the above discussion on initiation schools, it appears as if female learners fail to see the value of formal school education following their involvement in initiation schools and their marriages following the initiation school ritual raises school drop-out rates.

▪ **Ritual 3: Virginitv testing**

According to Mndende *et al.* (2008), virginitv testing (*ukuhlolwa*) is a public ceremony that is prevalent in traditional Zulu and Xhosa cultures to ascertain female sexual purity and worth. De Wet (2012) explains that generally, a girl is believed to be a virgin and, therefore, sexually chaste if her hymen is intact. De Wet (2012) further explains that the females who perform virginitv testing claim that it is a traditional practice that curbs the incidence of teenage pregnancy and the spread of HIV/AIDS.

According to radical feminism, it is such sex-gender systems that have created oppression, and radical feminists' mission is to overthrow this system by any possible means (Keller, 2003). In some cases, as per Xaba (2009), radical feminists believe that they must rage a war against males, patriarchy, and the gender system which confines them to rigid social roles and sexual exploitation such as virginitv testing. They completely reject these roles, all aspects of patriarchy, and in some cases, they reject males as well (*ibid*). Unfortunately, as per Mndende *et al.*'s (2008) explanation above, virginitv testing is marketed as ensuring purity of females, and this might be the reason for its popularity and for the girls unquestioningly embracing the practice regardless of feminist views.

According to Makaula (2010), as a traditional African practice, virginitv testing is seen as a way of encouraging pride in local heritage, identity, and indigenous cultural knowledge. Makaula (2010) furthermore points out that the validity of virginitv testing has been fiercely debated within South African public speeches. Vincent (2008) maintains that activists representing human rights such as gender equality and children's rights argue against the practice, raising concerns about how the practice invades the girl-child's rights to bodily integrity, dignity and privacy. Vincent (2008) adds that such activists also point out that the girl-child's safety and autonomy are compromised by such public displays of virginitv.

Manning (2010) adds that the testing procedures are, in most cases, unreliable and deficient regarding awareness of anatomy and hygiene. Those who oppose this practice argue that virginitv testing reinforces gender stereotypes by emphasising female learners' responsibility for preserving sexual morality.

Flanagan (2010) posits that this practice is likely to endanger female learners who pass the virginity test. A common example cited by Connor (1999), Zulu (2011) is that there is a common myth among many males in South Africa that sleeping with a virgin is a cure for HIV/AIDS. On the contrary, from Makaula's (2010) findings, the social view is that younger female learners see the practice of virginity testing as reasonable, while the older female learners see it as foolishness.

From the above discussion on virginity testing, it appears as if females are coached to ensure male sexual pleasure and embracing virginity testing. Another practice that is based on sexually pleasing a male is called stretching of the labia (*isinwebo*) and is discussed briefly below.

- **Ritual 4: Stretching of female genitalia**

Dunton (2008), in his research on cultural practices that involve bodily mutilation, wrote extensively on a Xhosa and Sesotho cultural ritual which is the stretching of the labia (*isinwebo*). Dunton (2008) explains that the stretching of the labia is a practice that is done by those traditional Xhosa families whose ancestral ties are linked to the *Sothos*, a tribe that predominantly lives in Lesotho, but also resides in some areas of the Eastern Cape where this study is conducted. According to Flanagan (2010), from a very young age, female children from such families are instructed to engage in an activity where they tug at their labia in order to elongate them. Dunton (2008) goes on to say that these female children are given further instruction on womanhood and how it is crucial that they are able to please a male sexually using their elongated labia.

Such teachings, according to Dunton (2008), emphasize the responsibility that the society places on a female towards enhancing the sexual pleasure of males. Munthali and Zulu (2007) point out that such a practice, apart from its potential to harm the body due to infections, also positions female children as sexual objects. Munthali and Zulu (2007) suggest that although elongating the labia is not necessarily a form of female genital mutilation, it is symbolic of female subordination.

From the discussion on stretching of female genitalia, it appears as if female genital elongation/stretching positions female learners as sexual objects and is a symbol of subordination.

Since subordination plays a big part in the socialization of Xhosa females, part of the consequences of not abiding by the rules for the traditional Xhosa girl is having the wedding finger cut (*ingqithi*). This is discussed below.

- **Ritual 5: Finger cutting**

In traditional Xhosa culture, cutting off the forefinger (*ingqithi*) is performed as a ritual. Manning (2010) explains that cutting off the forefinger is done as a medical intervention when a girl (more so than boys) is seen to not be well, and it is believed that cutting off the forefinger will cure her. In some cases, according to Mndende *et al.* (2008), cutting off the forefinger is performed on female learners who are seen as not subscribing to conventions of the society, and the explanation is that the girl needs ritual intervention (*ufuna isiko*).

From the discussion on finger cutting practiced on Xhosa females, it seems as if there is prevalence of violence towards females that is justified as rituals and insubordination of females is punishable through rituals such as cutting off of fingers.

Feminists view violence such as finger cutting mentioned above as manifestations of male dominance (Manning, 2010). In addition, Ralphe (2011) explains that feminists are of the opinion that females are oppressed due to their gender based on the dominant ideology of patriarchy. Ridding society of patriarchy, according to most feminist views, will result in liberation for females, males, minorities, and gays (*ibid*).

In instances where female learners in Xhosa traditional societies do abide by the societal norms, such female learners end up being married. According to Manning (2010), marriage, for the traditional Xhosa girl, is riddled with controversy that serves to further undermine a female as her own person. Manning (2010) cites examples of controversial practices within the context of Xhosa marriages. These are the bride-price, forced marriage, polygamy and

wife inheritance; these controversial issues regarding Xhosa marriages are discussed in greater detail below:

- **Ritual 5: Controversial Xhosa marriage practices**

The reason for the inclusion of controversial Xhosa marriage practices in this chapter is informed by the rural and semi-rural environments that the schools in this study are located. According to Mndende *et al.* (2008), females who grow up in such environments are expected to, as a natural progression, be married, mostly soon after puberty. Mndende *et al.* (2008) further explains that marriage forms a big part of the lives of people living in such communities, and an unmarried individual (male or female) becomes a social outcast. Such an important rite of passage in a society is likely to influence gender perceptions of teachers who are part of that community. As mentioned above, these are the bride price, forced marriage, polygamy and wife inheritance.

- **The bride-price**

Payment of the bride price is described by Mndende *et al.* (2008) as a practice whereby the family of the groom gives cows or cash to the family of the bride as a sign of goodwill and concretizing the relationship between the two families. While bride-wealth systems vary, the bride price (*lobola*) is referred to in this study in a Xhosa cultural context where it was originally intended to establish a bond between two families, but has, for many females, “been exploited”, as per Bam (2009: 11). Bride price is seen by feminist researchers such as Manning (2010) as one of the factors that perpetuate the existence of patriarchy which also contribute to abuse of Xhosa females by males.

According to the Commission on Gender Equality (2000), some females bought with bride price payment tend to feel like possessions owned by their husbands, with little control over their own bodies both sexually and in terms of their labour. Bam (2009) contends that in black African Xhosa cultural discourses, without a husband, a female has no voice in the community. Bam (2009) adds that such a female is accorded no respect or value as she is considered to be undignified and promiscuous; this therefore puts pressure on females to stay in abusive

marriages where they are constantly reminded that the bride price has been paid for them.

Manning (2010) points out that according to Xhosa tradition, when a female gets married, her reproductive aptitude is transferred from the house of her father to that of her husband. Such a notion is emphasized to the female through a bride-teaching ceremony (*ukuyalwa*) mentioned previously in this chapter. Mndende *et al.* (2008) explain that a bride-teaching ceremony is a ceremony that takes place on the afternoon of the wedding day whereby a group of females teach the bride what is acceptable and not acceptable behaviour of a wife in that homestead. Mndende *et al.* (2008) elaborate that the content of such teachings is based on the premise that since a bride price has been paid for the bride, it is expected that she will do without questioning everything the in-laws and the husband expect her to do. For the bride, according to Jobson (2005), part of the teachings is that there is no notion of marital rape, since wives cannot refuse to have sex with their husbands.

According to Peires (2010), during the afore-mentioned ceremony, the bride is told that the family is expecting a baby within the year, and that if she does not bring forth an heir, she should be aware that the male is allowed to bring a female who is willing to carry the family name forward. Mbiti (2007) argues further by pointing out that in many patriarchal cultures such as the Xhosa culture, sexuality is used as the foundation upon which social relations between females and males are defined. According to Xaba (2009), this process of interpreting gender and biological sex as synonymous and gendering identities accordingly is driven by the interests of males from their position of power.

From the discussion of the bride price above, it appears as if girl children are seen as a transactional entity to assist the family to gain wealth through the bride-price by their parents.

Various researchers of Xhosa culture such as Maharaj (2006), Morojele (2006) and Pandey (2004) have pointed out that, traditionally, Xhosa females are not permitted to use any form of contraception without the husband's or the mother-in-law's consent. These researchers also mention that negative peer opinions around condom use and false beliefs that contraception reduces sexual

enjoyment for the male are internalised by Xhosa traditional males. According to these researchers, these beliefs dissuade Xhosa males from using condoms and place their wives/partners at risk of contracting sexually transmitted diseases and HIV/AIDS, while at the same time Xhosa traditional females do not have the power to negotiate safe sex.

The second controversial issue regarding Xhosa marriages is referred as forced marriage (*ukuthwalwa*) and is discussed below.

- **Forced marriage**

Forced marriage, according to the Blackwell Encyclopaedia of Sociology (2009), is a marriage in which one of the partners (predominantly female) is married without his or her consent or against his or her will. In traditional Xhosa culture, forced marriage (*ukuthwalwa*) was, and still is, accepted to some extent. According to Xaba (2009), this practice is one of the major causes of high dropout rates for female learners in traditional rural areas. Zulu (2011) explains the actual process of forced marriage as that the would-be husband arranges with the girl's family and pays bride-price (*lobola*). Zulu (2011) elaborates that sometimes the girl is aware of the arrangement, but that mostly she is not. According to Zulu (2011), on an agreed-upon date by the families, one of the elders from the girl's side sends the girl on some errand and alerts the would-be husband's representatives where they are likely to meet and abduct her (sometimes on the way from school). Zulu (2011) explains further that if the girl resists abduction, she is beaten up by the abductees to the point that some female learners become badly injured.

As a result of the violence that occurs during the abduction, most female learners simply go along to avoid the beatings. Ntuli (2011) explains that on the girl's first night with the in-laws, the girl is required to have sex with the husband. The belief, as per Ntuli's (2011) explanation, is that the girl will not be motivated to run away since she has, by virtue of the sexual experience (and possible pregnancy), become damaged goods whom no other male in the village wants. According to Ntuli (2011), in the rare cases where the female learners dare to escape and go to their homes, their fathers personally take them back, and this

second trip comes with a possibility of a beating from the husband or even her father. Xaba (2009) concedes, however, that the vigilance of the South African Police Services (SAPS) in some areas has contributed to this practice's decrease.

From the discussion above on forced marriage, it appears that forced marriages are a common occurrence that affects rural school female learners. In addition to forced marriages, another controversial marriage practiced in traditional Xhosa culture is polygamy, and this is discussed below:

- **Polygamy**

According to Manning (2010), polygamy or polygyny (*isithembu*) is a custom of taking more than one wife practised in many traditional communities in South Africa. Mndende *et al.* (2008) describe polygamy as the act of a man marrying more than one wife; in the Xhosa and Zulu cultures, polygamy is still being practiced. According to Mndende *et al.* (2008), in South Africa, a male is legally allowed to take more than one wife as long as the additional wives are married only traditionally. Mugambe's (2006) research shows that cultural traditional norms and practices relate as much to the educated and uneducated, the rich and poor, professional and unskilled. It is not unique, contends Mugambe (2006), to find a professional Xhosa male insisting on polygamy or wife-inheritance.

In terms of legislation, the South African Customary Marriage Act (1998) allows black African males to have more than one female sexual wife. According to the Human Rights Commission Report (2007), there is ambiguity in response to this practice of polygamy, and there are black African males and females who are opposed to this practice, while many support it. The Human Rights Commission Report (2007) continues to say that those who support polygamy practice do so according to their cultural bias which maintains that a female's identity is only fully secured through her husband. Mabovula (2004) therefore concludes that for this reason some females would rather be in a polygamous relationship than to remain unmarried. Jobson (2005) states that such ambiguity in the aforementioned is evident in the fact that the 2003 Woman's Protocol in the

African Charter on Human and People's Rights no longer contains a clause prohibiting polygamy.

In terms of how the husband relates to his wives, Peires (2010) explains that the husband in a polygamous marriage may rotate his visits for conjugal rights, depending on which one of the wives is a favourite at that time. Manning (2010) is of the opinion that on the surface, such an arrangement seems smooth, but that polygamy actually causes a lot of grief for the wives, especially the first wife. Manning (2010) points out that, according to tradition, the first wife's approval of the additional wives is to be sought out by the husband; however, this does not happen, and the husband goes ahead and marries the additional wife whether the first wife approves or not.

Peires (2010), in her research on polygamy in the Eastern Cape, reports some myths that females in polygamous households abide by. Peires (2010) adds that these myths are as a result of undue pressure put on these females to give birth to male offspring. Example of these, according to Peires (2010: 32), are that the wife needs to cleanse herself thoroughly before having intercourse with her husband since a sperm meant to conceive a boy is "fussy" and needs a "sparkling clean" womb for it to grow. Peires (2010) also cites examples of medicine usually prescribed by traditional witchdoctors (*amagqirha*), used to clean the womb; the ingredients for such medicine are Jeyes Fluid (a potent cleaning chemical not meant for human consumption) mixed with cayenne pepper, ground dagga, and a traditional herb that is used to when communicating with ancestors (*isilawu*).

From the discussion on polygamy above, it appears as if females are subjected to humiliation in the manner where they have to compete for the husband's attention. Since in the Xhosa culture reproduction is seen as a vital part of existence, the discussion above shows the lengths that females go in order to conceive due to pressures in the society. In some cases where a female cannot conceive, a practice called wife inheritance (*ukungenwa*) may be suggested by the elders of the family. This practice is discussed below.

- **Wife inheritance**

Within the strict confines of certain cultural contexts, especially traditional Xhosa culture, divorce is not permissible. According to Bam (2009), in the event of a female being unable to conceive, the options of taking of another wife by the husband and wife/spouse inheritance (*ukungenwa*) are explored. Jabavu (2006) explains that the brothers or cousins of a male whose wife cannot conceive are approached to have sex with her so that she can conceive. According to Jabavu (2006), both the wife of the approached male and the female who cannot conceive do not have a say in the matter and, due to desperation, the female who cannot conceive sleeps with the male relative without a second thought; when she conceives, the child is considered as the child of her husband and not the child of the male relative.

Mndende *et al.* (2008) further explains that wife inheritance also occurs in the event of the death of a husband. The common saying, according to Bam (2009), is that the bride price (*lobola*) was paid for the bereaved female, and that this payment will have been wasted if she is allowed to leave the homestead following the death of her husband. Bam (2009) points out that wife inheritance, therefore, dictates that the wife's late husband's brother or other male relative should be appointed to marry the widow. In such a case, the widow might be the second or third wife, depending on the marriage status of the male relative that she is marrying. Nigel (2011) contends that females who succumb to this practice of wife inheritance do so primarily as a result of economic vulnerability. Manning (2010) claims that this particular practice regulates that females cannot decide or choose to live without a husband or get remarried to someone of their choice.

From the discussion on wife inheritance above it seems as if females are exposed to dangerous sexually transmitted diseases through multiple sexual partners.

In view of these controversial marriages, feminists have shown that the so called natural differences between males and females are not true. Females are perfectly capable of building a successful career as males are and that females

no longer feel their only goal in life is marriage and children. In the context of this study, it would be interesting to find out how many of the participants would agree and embrace this notion, having been brought up to depend wholly on males for their survival.

Nigel (2011) therefore claims that due to society holding culture in high regard, during the process of becoming socialized, gendered characteristics are strengthened in family and social spheres until they shape the individual's very understanding of culture and priorities within this culture.

Having discussed culture as an agent of socialization above together with the various Xhosa rituals, the discussion proceeds to the next socialization agent which is language.

2.5.2.4 Language as an agent of socialization

According to Gergen (2011), language is a powerful tool that socializes people worldwide. This is especially true and very significant in societies world-wide where every aspect of interaction is done through language. Language can therefore be analyzed to uncover how different genders are socially constructed. West and Zimmerman (2008) discuss how, when males and females interact using language, they reinforce essential gender differences and therefore maintain a power difference. According to Mbiti (2007), this posterity is highly valued in African communities and communicated through language.

Mndende *et al.* (2008) concede that among Xhosa communities, the value for females is found in childbearing, motherhood and marriage, while that of a male is found in leadership, being the provider, and maintaining superior roles to females. These values are expressed in various cultural sayings. Such aphorisms may be socially coined words or terms such as 'betting on females' (*ukubheja*) which is a popular Xhosa term for how a boyfriend is expected to provide money to the girlfriend(s).

Other sayings which are powerful and have historical significance are proverbs. Discussing gender through a selection of African proverbs is uncommon but helpful because language is a dynamic and potent tool that has been used for

generations within communities to communicate all aspects of gender. According to Spargs (2005), proverbs and sayings skilfully embody a self-proclaimed truth or common belief. African proverbs reveal the philosophy and thinking of African people and unlike other literary forms, proverbs and sayings are concise. This concise quality of proverbs captures the beliefs, attitudes and perceptions of people with regard to the social roles, social position, and traditionally assumed character traits of males and females. In his study, Spargs (2005) explored how proverbs in the Xhosa culture, as well as the rest of Africa, are used as an illustration of how gender values are entrenched in the communal consciousness of African people.

In view of females who appear oppressed through Xhosa culture and language, Freire (1972) espouses that freedom for such individuals begins with the recognition of a system of oppressive relations, and one's own place in that system. The task of critical pedagogy, according to Kincheloe (2008), is to bring members of an oppressed group to a critical consciousness of their situation as a beginning point of their liberation, and this study seeks to raise such awareness to female learners in rural and semi-rural schools.

Spargs (2005) used his exploration of the proverbs approach in order to understand social constructions of gender and the nuances of gender inequalities within African communities. Spargs (2005) further asserts that proverbs, as literary forms, provide insights into substantial social aspects which give a discerning understanding of values and beliefs. In addition, Sow (1999) asserts that proverbs help to illuminate the African perspective to gender and demonstrate that females and males are the products of their culture, their beliefs and their history. More importantly, according to Mohanty (2003), proverbs demonstrate that females are shaped through the multifaceted interaction between class, culture, religion and other conceptual institutions and structures. Below are some selected proverbs whose gender issues are linked to concepts such as patriarchy, gender, and gender role stereotypes discussed in this chapter.

In most of the proverbs below, the attributes leaning on power and accomplishments are reserved for males. Prevalent in these proverbs are

females being regarded with little respect and assigned negative traits. The gender issues regarding demeaning of females are represented by the following proverb from the *lingoweb* (2004):

“A woman without a man is like a field without seed” (Xhosa proverb)

According to Manning (2010), the marriage institution in traditional African societies is for posterity and legitimatising children. The proverbs below reinforce the fact that the female is largely important for her biological role and that her capacity to give birth to a male offspring carries prize value in diverse African communities, in support of Manning’s (2010)’s argument. An example of such a proverb from *lingoweb* (2004) is:

“The woman whose sons have died is richer than a barren woman” (Kenya).

According to Zwide (2011), based on these proverbs above, it is not difficult for one to establish the mind-set of the African male. Zwide (2011) argues that the origin of most of these proverbs can be traced to male characters – either kings, chiefs, the rich, or notable males in the various communities, traditional healers, or linguists at the chiefs’ courts.

The aforementioned originators put their observations together in these proverbs to convey certain viewpoints. Zwide (2011: 68) further argues that these male originators sought to belittle their female counterparts because in the traditional African society the male has always been “on top of things”. Zulu (2011) points out that popular belief in traditional Africa is that the female’s place is the kitchen. This traditional mind-set is exposed by the gendering that occurs in traditional proverbs. Zulu (2011) also adds that the majority of females, especially in traditional African societies have been socialized through language to believe that childbearing and motherhood are immediate and visible achievements. This belief, according to Zulu (2011), has influenced many traditional communities into believing that motherhood is a significant social milestone that has respect and social recognition.

Unfortunately, this significance of motherhood in African societies does have negative repercussions in present day society as per Zwide’s assertion (2011).

According to Zwide (2011), the societal position awarded to childbearing and motherhood is partly responsible for the prevalent problem of teenage pregnancy and early marriages in Africa. According to Lindani (2009) in South Africa, where this study was conducted, the rate of teenage pregnancy is very high. Lindani (2009) argues that such statistics paint a picture that suggests that education of female learners comes into competition with reproductive roles and expectations of motherhood. The proverbs cited below affirm the aforementioned assertion through their demonstration of the fuzziness between biological and social roles.

“A house with daughters only will never grow beyond that generation” (Xhosa).

The proverbs above from *lingoweb* (2004) demonstrate that while social attributes and expectations for females might vary through the different phases of life, there are inconsistencies with each stage:

- Woman is like the earth: even a fool sits down on her (Zaire);
- Woman is like the earth: everyone sits down on her (Zaire).

The two Zairean proverbs above represent a paradox in the social role and position of females. The first proverb implies that the female is open to misuse and even abuse, while the second portrays her as close to nature from whom nourishment is drawn. Power and social position is highly contested terrain in gendered societies. In the proverbs below, female intellectual abilities are portrayed as being very low:

- A woman and an invalid are the same thing (Kenya);
- Woman’s intelligence is that of a child (Senegal).

Finally, the proverb below highlights some of the pressures African communities have had to undergo with regard to formal female education.

If you educate a man, you educate an individual, but if you educate a woman, you educate a family or nation (Ghana, adopted by South Africa).

From the discussion on language as an agent of socialization, it appears that language is a powerful socialization tool which is used in a derogatory manner to communicate inferiority of females and superiority of males.

In view of language as an agent of socialization, this study concedes that part of developing a critical consciousness is critiquing the social relations, social institutions, and social traditions that create and maintain conditions of oppression. In the discussion on language above, it can be surmised that the home is the primary social institution that perpetuates oppression through language. In addition, as mentioned above, the social tradition of respect (*hlonipha*) further fuels such female oppression through use of language. For Freire (1989), language is a powerful tool and a primary form of cultural action, and as an action, it must relate speaking the word to transforming reality. To do this, Freire (1989) suggested representing problematic social conditions that could become the focus of collective dialogue (and, eventually, the object of strategies for potential change).

2.6 Chapter synthesis

Chapter 2 presented research conducted on the constructs: gender, patriarchy and socialization through critical theory and feminist theoretical frameworks. What emerged from literature in this chapter is that patriarchy has an overarching influence regarding the establishment of gender stereotypes in societies. In addition, literature shows patriarchy's influence in such gendered societies leads to gender inequalities borne out of socialization of males and females. Such inequalities are strongly challenged by all feminist theories, specifically radical feminism (Manning, 2010). Literature on socialization reveals gender as a socially constructed phenomenon, and this is a point which radical feminists of education contest as perpetuating gender stereotypes in societies and later in schools (*ibid*). This chapter also explored ways in which various agents of socialization such as the home, religion, culture and language play a role in influencing gender perceptions of both males and females. For this study, it was important to determine how such gender perceptions, possibly, negatively affect female learners' e-learning proficiency.

Gender perceptions mentioned above seem to stem from power dynamics between males and females, according to Manning (2010). Power, according to the literature study engaged in this chapter, is maintained through: reducing the self-confidence of females, relegating females to private realms whilst promoting males to public spheres; biological determinism where the males control the sexuality of females; gender stereotypes where females' abilities are trivialized and male potential is promoted, and the use of cultural practices to preserve the unquestioned status of males. This study built on the above discourse to determine if such power dimensions occur in the schools and how these possibly cause gender perceptions that could affect female learners' e-learning proficiency.

According to critical theorist, Silverman (2006) (cited in Ralphe, 2011), those who have power and status in society, which is males in this case, control the rest of the society, and by so doing, unequal conditions can be maintained. Critical theorist Foucault (2006) adds that those who maintain this *status quo* do so in order to maintain the social and power benefits, and do everything in their power in order to maintain this power.

Critical theorist Kincheloe (2008) views agents of socialization mentioned earlier in this section as drivers who control individuals in a given society. The aforementioned control causes socialization agents to view the *status quo* as the only way and the right way to live.

Such *status quo*, according to Xaba (2009), seems enforced through cultural and family positions whereby it is believed that female learners should be raised to accept male dominance. The debates and points raised in this chapter are vital for this study because the schools that participate in this study are situated in rural and semi-rural societies which are traditional and patriarchal by nature. The researcher was, therefore, interested in determining if these debates are applicable to this study and, if so, how they influence e-learning gender perceptions to the point where they possibly affect e-learning proficiency of female learners.

The next chapter, namely, Chapter 3, discusses literature on gender, pedagogy, and e-learning.

CHAPTER 3: GENDER, PEDAGOGY AND E-LEARNING

3.1 Introduction

This chapter presents debates on social constructs: gender, pedagogy and e-learning. These constructs are centrally positioned to address the core of this study whose main aim is to determine teachers' gender perceptions and how they possibly affect e-learning proficiency of female learners.

The debate of the three constructs indicated above, namely, gender, pedagogy and e-learning, is done within the theoretical framework of social constructivism. The relevance of social constructivism to the afore-mentioned social constructs is because of Vygotsky's theory of social constructivism which champions the Zone of Proximal Development (ZPD). The ZPD is the gap between what the learner knows and what the learner should know; such a gap could be bridged by assistance from the *knowledgeable* other. The knowledgeable other, in the case of this study, could be a teacher or another learner whose input is deeply affected by their socialization.

As the debate on how social constructivism influences the three social constructs, (gender, pedagogy and e-learning), it will also demonstrate the relevance of the two theoretical lenses used in Chapter 2, namely critical pedagogy and feminism. Critical pedagogy and feminism will be debated minimally in this chapter because they were discussed extensively in Chapter 2. The above theories, namely social constructivism, critical pedagogy and feminism, will inform gender perceptions of e-learning, as the debate will show.

This study sought answers to the following research questions:

- a) What are the e-learning teachers' gender perceptions?
- b) To what extent do the e-learning teachers' own gender perceptions influence proficiency of female learners in e-learning classes?
- c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

This chapter implicitly addresses research questions a) and b) above and explicitly addresses research question c).

The first section of this chapter discusses social constructivism theory, which is the main theoretical lens that grounds this chapter.

3.2 Social constructivism

Social constructivism is a variety of constructivism that emphasizes the collaborative nature of learning, particularly in school environments. Social constructivism was developed by Vygotsky (1994) who argued that learning was not simply the assimilation and accommodation of new knowledge by learners; it was the process by which learners were integrated into a knowledge community and through being assisted by the others (Vygotsky, 1994). Knowledge is not simply constructed; it is co-constructed (*ibid*).

The relevance of this theory to this study is that the issue of collaborative learning is seen as useful, particularly with reference to how teachers facilitate such collaboration between female and male learners in the e-learning classroom for them to be proficient in e-learning.

Within social constructivism, Vygotsky (1994) introduced the concept Zone of Proximal Development. The Zone of Proximal Development (ZPD) is an area of learning that occurs when a person is assisted by a teacher or peer with a skill set higher than that of the subject (*ibid*). The teacher or peer is termed *the knowledgeable other*, according to Vygotsky (1994). The argument of the ZPD is that the person learning the skill set cannot complete it without the assistance of the teacher or peer. This *knowledgeable other* therefore assists the student to attain the skill that the student is trying to master.

ZPD's effectiveness depends on the following conditions: how susceptible the learner is to types of assistance, the sequence in which these types of help are offered, the flexibility or rigidity of previously formed stereotypes, how willing the learner is to collaborate, and support afforded by the learning environment to the help offered the learner (Vygotsky, 1994). Such conditions, according to this author, can impact the level of learning proficiency that the learner reaches (*ibid*).

The conditions raised above regarding the effectiveness of ZPD are relevant to this chapter as they offer possible explanations to gauge whether the conditions

in the e-learning classrooms of the participating schools do support e-learning proficiency in female learners.

According to Vygotsky (1994) education practitioners should not only look at what students are capable of doing on their own; they have to look at what they are capable of doing in a social setting. In many cases students are able to complete a task within a group before they are able to complete it on their own (*ibid*). He notes that the teacher's job is to move the student's mind forward.

Social constructivism also argues that motivation for learning is both extrinsic and intrinsic. Since learning is, essentially, a social phenomenon. Learners are partially motivated by rewards provided by the knowledge community (*ibid*). On the other hand, because knowledge is actively constructed by the learner, learning also depends, to a significant extent, on the learner's internal drive to understand and promote the learning process (*ibid*).

Collaborative learning methods are, therefore, at the forefront of social constructivism. Such methods, according to Vygotsky (1994), require learners to develop team-work skills irrespective of gender and to see individual learning as essentially related to the success of group learning. Moreover, collaborative learning should be seen as a process of peer interaction that is mediated and structured by the teacher.

To apply the above discussion of social constructivism to e-learning, according to Muhuro (2009), a social constructivist e-learning classroom entails learners being offered a problem-solving or strategic reasoning task; this places them at the centre of the learning activity with assistance either from the software prompts, a teacher or peer. Such guided and collaborative learning was the goal of the e-learning initiative that the learners participating in this study went through in 2011 (Centre for Learning & Teaching Development, 2011). According to Davis (2009) cited in Mayisela (2010), collaborative learning is one of the focal points of social constructivism and enables the learners to eventually *construct* their own knowledge, skills, or understanding from their peers and their own observational and reasoning capabilities.

Various investigations, using different approaches and research frameworks, have proved collaborative learning to be effective in many kinds of settings and

contexts, according to Mlitwa and Koranteng (2013). In a socio-constructive e-learning classroom, teachers should assign tasks that students cannot do on their own, but which they can do with assistance. They should provide just enough assistance so that students learn to complete the tasks independently and then provide an environment that enables students to do harder tasks than would otherwise be possible (*ibid*).

Since this chapter examines factors that could, possibly, influence the e-learning proficiency of female learners, various factors have been identified by e-learning practitioners such as Jack (1997), Muhuro (2009) and Mlitwa (2009) as affecting e-learning proficiency in general and specifically in female learners. For the purposes of this study, factors that are discussed below are teachers, curriculum, peer collaboration and female learners' support because these seem to be relevant to the context of this study which is rural and semi-rural schools.

3.3 Factors that affect e-learning proficiency in female learners

The first factor identified by literature as affecting e-learning proficiency of female learners is discussed below, namely, teachers.

3.3.1 Teachers

The discussion on teachers below examines how the following factors could affect e-learning proficiency of female learners. These are: the teacher's role in an e-learning constructivist classroom, inadequate training of teachers in e-learning, lack of e-learning acceptance in the socio-constructivist class, e-learning teacher's interaction with learners of both genders, teachers' influence on female learners regarding roles, subjects and careers such as technology.

3.3.1.1 The expected role of e-learning teachers versus teacher training

The gap between the role that teachers are expected to play in a socio-constructive e-learning class and how they are equipped to do so is according to Jack (1997) one of the major factors affecting e-learning proficiency in general. The afore-mentioned author found that teachers still used traditionalist teaching approaches in their e-learning classroom, and the learner-centred approach espoused by the socio-constructivist approach was not applied. As a result, the

learners were not able to exercise their learning independently and in a manner that allowed them to explore and control their own learning, and this seemed to affect the level of success in the e-learning classroom (*ibid*). In view of this study, Jack's (1997) research is important because it informs the study in terms of exploring whether e-learning classes in the participating schools were teacher or learner centred and how this possibly affected the proficiency of female learners.

According to Mlitwa (2009), the constructivist e-learning class should be structured in a manner that allows for flexible roles between the teacher and the learners. Mlitwa (2009) maintains that such a role-change is vital for successful learning in an e-learning classroom, and it is important for the e-learning teacher to adopt the mind-set of a learning facilitator. Lajoie and Derry's (2007) descriptions of the role of the teacher in an e-learning classroom, as underpinned by constructivist principles, are that the teacher should be: an instructional designer, learning progression partner, advisor, team coordinator, and, lastly, a monitoring and assessment specialist.

With regards to this study, given the patriarchal and traditional communities that the schools are based in, it would be of interest to determine how much of the teachers' gender perceptions can allow such a role-change to foster e-learning proficiency in female learners, as suggested by the arguments for a constructivist e-learning classroom.

The implications of Lajoie and Derry's (2007) descriptions discussed above place the teacher in an unconventional position where there is a power shift in the classroom. In addition, for this study, it is important to consider the depth in which the teachers understand the dynamics in a constructivist classroom, and the professional development that is afforded such teachers in order for them to successfully play their role in a constructivist classroom to promote e-learning proficiency, particularly in female learners.

Having discussed the role of teachers in a constructivist class above, the discussion below proceeds to the professional development afforded e-learning teachers.

3.3.1.2 Inadequate teacher professional development in e-learning

The discussion in this section is related to the previous section whereby the role of the teacher in an e-learning classroom was discussed. This section explores whether there exists adequate training for teachers to meet the expectations that exist for the role they are required to play in an e-learning classroom, and how this possibly affects e-learning proficiency of female learners. Such an enquiry is important for this study as it determines whether the teachers in the participating schools are sufficiently skilled to play a role that promotes proficiency in e-learning in learners, specifically female learners.

Bytheway (2010) stresses the importance of teacher development in e-learning skills as one of the best ways to develop a constructive and developmental approach to learning and avoid teacher apathy towards e-learning. Mlitwa (2009) argues that continuous professional development for teachers as drivers of e-learning is vital, and should not only end with the initial training provided when computers are first introduced to a school. The afore-mentioned author who champions constructivist learning insists that the e-learning teacher needs to be orientated to a teaching and learning approach such as constructivism during training. This would ensure that the teacher assimilates his or her teaching to accommodate the role change that is required by constructivism in an e-learning classroom (*ibid*). In the case of this study, such training would ensure that the teacher makes her e-learning classroom more student than teacher-centred. This would also ensure that the teacher encourages group work amongst learners of different genders as well as upholds individualism and independent learning in learners of different genders, and this could promote e-learning proficiency in female learners.

The White Paper on e-Education (DoE, 2004) clearly outlines the skills and knowledge that teachers, nationally, are expected to have. According to the afore-mentioned document, every teacher, manager and administrator in General and Further Education and Training must have the knowledge, skills and backing that they need in order to integrate technology in teaching and learning. In the context of this study, the e-learning teachers are, therefore, meant to be equipped with e-learning implementation and facilitation skills,

according to this document, since these are high schools and fall under the category mentioned above. This document, however, does not make explicit the type of skills that these teachers need to have, particularly in view of the learning approach such as constructivism and this study's interest which is gender and e-learning proficiency in female learners.

SchoolnetSA (2009) mentions five levels of professional competency in e-education that teachers should attain. These are the ability to: use computers and teach learners to use computers; use various techniques in teaching and learning; use technology to augment the curriculum and use integrated systems for management and administration; to incorporate technology into teaching and learning activities and use assimilated systems for management and administration within a community context (SchoolnetSA, 2009).

Just as the White Paper on e-Education (DoE, 2004) fails to overtly pinpoint the specific skills an e-learning teacher should be trained in, the same goes for the SchoolnetSA (2009) guide document. What this implies, therefore, for this study is that while there are guiding documents available for e-learning implementations, these are quite general and do not break down the required strategies, learning and teaching that should occur in an e-learning class.

Various issues such as gender (gender-sensitivity in e-learning), context (rural, semirural), approach (teacher-centeredness or learner-centredness) seem not to be covered sufficiently enough to clarify to the e-learning teachers what it is that is expected of them. Such lack of clarity on training of e-learning teachers might contribute to lack of e-learning proficiency in female learners. In view of the gaps identified regarding the lack of clarity on e-learning skills in the previously mentioned documents, it is argued that lack of acceptance of e-learning may occur amongst e-learning teachers, and sometimes learners. Furthermore, such lack of acceptance of e-learning by both the teachers and learners may, possibly, be one of the factors that affect e-learning proficiency in female learners.

Dlodlo (2010) reports another dimension regarding gender perceptions towards use of computers based on her study conducted in rural Limpopo schools.

According to her study, female teachers reported unwillingness to teach using computers because training in e-learning instruction was prioritized for their male colleagues who were required to cascade the training to the female colleagues.

In this study, female teachers reported that the cascaded training they received from their male colleagues was hurried and not informative enough for the female teachers to be skilled sufficiently to teach using technology. This study shows that gender perceptions sometimes emerged from gender stereotypes within the education system, and these translate to resistance towards e-learning implementation, particularly from female teachers who feel side-lined in favour of male teachers.

In the section below, lack of e-learning acceptance in an e-learning class is discussed in more detail.

3.3.1.3 Lack of e-learning acceptance in a constructivist classroom

In this section, lack of acceptance of e-learning is discussed as a result of training gaps for e-learning teachers as discussed above. In his study on e-learning uptake in rural schools, Jack (1997) found that due to lack of clarity and training regarding their role in the e-learning classroom, teachers developed negative attitudes (perceptions) and lack of acceptance for e-learning. This according to Jack (1997) affected the manner in which they taught learners and the learners' proficiency in e-learning. For this study, e-learning acceptance is viewed as relevant because if teachers, who are the drivers of e-learning, have negative perceptions towards e-learning, this would possibly lead to lack of e-learning proficiency for learners.

According to Wadell (2010), globally, in most schools in Britain, the uptake and success of e-learning in a constructivist classroom depends on the attitude or perceptions that the teachers have towards using technology in their classrooms. The above-mentioned issue on perceptions is supported by Stotekamp and Kies (2007), who conducted extensive research on teachers' and students' perceptions on technology for teaching and learning under the ambit of the Technology Acceptance Model (TAM). According to these authors,

the Technology Acceptance Model (TAM) is a useful model when studying gendered technology in a constructivist classroom because the core constructs of TAM are balancing collaboration and independent learning within *perceived usefulness* and *perceived ease of use* of technology by different genders. In this study, the TAM seemed relevant in unearthing information regarding how male and female teachers' gender perceptions regarding technology possibly affect female learners' e-learning proficiency. In this case, this therefore guided the data collecting tool of the study to collect responses by gender. The TAM also seemed relevant and applicable in eliciting data from the learners by gender so as to determine how female and male learners differ in the manner in which they view e-learning as this could be one of the factors that affect e-learning proficiency in female learners.

Gender seems to be an influential background factor in the TAM as it affects the level of computer anxiety, perceived usefulness and ease of use, according to Ong and Lai (2006). These authors (2006) also claim that female learners generally experience more computer anxiety and a lower degree of perceived usefulness and perceived ease of use than males, and such anxiety is mostly fuelled by how their society and their teachers drive gender stereotypes with regards to technology use by females. Such computer anxiety was considered, in this study, as a factor that could affect e-learning proficiency in female learners.

Ware and Stuck's (2005) investigation on gender perceptions with respect to computers and software in USA found that females were not only under-represented in learning programmes through use of female characters, but were also portrayed less favourably as weak individuals. Ware and Stuck (2005), in many computer magazines that their study evaluated, found that females were often depicted as being less experienced and more passive users of technology. Thus, the influence of the technology, with respect to socialization of individuals, especially within the gender context, is an issue that continues to intrigue researchers of technology in societies.

The issue of gender perceptions is also debated by Wadell (2010) who claims that in many countries e-learning use is monitored in most schools to determine

its usefulness in terms of how it is perceived by both students and teachers. Golden, McCrone, Walker, and Rudd (2006) agree that the attitude and confidence of the teachers have a great influence on the use of e-learning in Sri Lanka, based on their study that revealed that negative attitudes of both teachers and students, particularly females, towards e-learning led to the dismal failure of an e-learning platform, used in their study, to reach its objectives.

With regards to students' perception, Andersen-Levitt (2008) report that in Guinea students' poor performance in e-learning lies in students' academic confidence, attitude towards e-learning, student support, access, flexibility, learning activity and localization of content of the e-learning programme or curriculum.

The discussion above on e-learning acceptance in a constructivist classroom seems to indicate that perceptions towards e-learning are responsible for cultivating both the negative and positive attitudes of teachers and learners towards e-learning. Furthermore, it seems as if no amount of constructivist and developmental support can assist e-learning if gender perceptions are not at the right place from both the teachers and learners because these affect their technology acceptance and affect e-learning proficiency.

The section below discusses how teachers' interaction with learners of different genders possibly affects e-learning.

3.3.1.4 Teachers' favouritism in their interaction with male and female learners

The manner in which teachers interact with learners of different genders is seen as influential by researchers such as Ogundiphe (2005) in determining the level of success of learners. The above-mentioned author sees such interaction in terms of the self-fulfilling prophecy theory which argues that predictions made by teachers tend to make themselves come true. Mutekwel and Modiball (2012) explored factors in the school that promoted gender role stereotypes, how these informed career aspirations and choices for female learners and male learners, and the manner in which teacher attitudes and expectations influenced, specifically, the female learners' success and career aspirations.

During classroom observations, Mutekwel and Modibal (2012) found that male learners received more teacher-initiated contact than their female counterparts. Mutekwel and Modibal (2012) report that this prevalence of favouritism was evident because male learners were asked more questions than female learners and contributed more during class discussions. This discussion is vital for this study to determine how teachers interact with learners of different genders as a possible factor that may influence e-learning proficiency in female learners.

Peterson and Barger (1985) cited in Kitetu (2004:6-7) are of the opinion that, since behaviour is guided by a personally-held system of beliefs, values and principles, there are signs that teachers' gender-related beliefs about learners might influence their (teachers') classroom behaviour. According to Findley (2006), this point above suggests that teachers' beliefs or expectations might directly influence their classroom behaviour, and thus teachers need to continually question how their belief systems affect learners.

In South Africa, Taole (1993) cited in Jack (1997), found that in her study that was based in Eastern Cape schools, certain teacher behaviour combined with the organisation of instruction made up a pattern that appeared to favour male learners. Taole (1993) cites an example of competitive activities that were observed in the study as encouraging to the male learners but had a negative influence on female learners. Taole's study (1993) noted that since competitive activities were much more prevalent than cooperative activities, it appeared that classrooms were more often favourable to male learners than to female learners' learning.

From the discussion of teachers' interactions with learners, it appears as if teachers initiate contact with male learners more than female learners, are influential in perpetuating gender stereotypes in schools and thereby possibly contribute to female learners' decreased confidence. The section below explores how teachers' influence in gendered roles, subjects and career choices possibly affects the e-learning proficiency of female learners.

3.3.1.5 Teachers' influence on female learners on roles, subjects and careers

In this section, national and international trends of teachers' influence on gender roles for different sexes, subjects and career choices are discussed within the context of how these could affect the e-learning proficiency of female learners. This refers to how teachers allocate tasks to male learners and female learners in schools and also how teachers tend to influence the learners' subject and vocational choices. This discussion is vital in this study as it raises the question whether or not teachers in this study do influence gender roles, subject choices (e-learning), and vocational choices (technology-based careers).

Nkwinjeh and Mawarire (2007) conducted a study which sought to find out what informed the teachers' role allocation and subject streaming in Zambian schools. The responses of the teachers revealed that teachers were very specific about which tasks to allocate male learners and which ones to allocate female learners. These tasks included what teachers perceived to be gender-appropriate roles for male learners and female learners. In the same study conducted by Nkwinjeh and Mawarire (2007), findings were that, in addition to role allocation by gender, teachers used gender when streaming learners into subjects/vocational streams.

The result of this gender differentiation is also evident in the responses Nkwinjeh and Mawarire (2007) received from female learners regarding their intended career choices. These career choices were teaching, cosmetology, hotel management, catering, and pharmacy, and only 2% of their female respondents argued in favour of the more male-dominated careers such as engineering and Information Technology.

The reasons cited by the female learners for traditional female-oriented career aspirations included their families' influence, society's attitudes towards historically male careers, and how gender-specific tasks are allocated to female learners and male learners, both at home and in school. Such gender perceptions and influence as pointed out above are under attack by critical theorist, Habermans (1972) as cited in Cohen, Manion and Morrison (2011) who

argues that traditionalist ideology in schools is the main cause of inequality in the schooling education.

In Zimbabwe, according to Mutekwel and Modiball (2007), the school curriculum inherited from pre-independence Zimbabwe was modelled on the English colonial system, with Zimbabwean female learners being educated for domesticity whilst male learners were prepared for employment and the role of family head and breadwinner. The findings of this research were that male learners and female learners were taught different practical and vocational subjects. The male learners were required to study technical subjects such as metalwork, woodwork, agriculture, technical graphics and building and were encouraged to pursue science subjects. On the other hand, female learners were offered domestic science subjects, typing and shorthand, and were encouraged to pursue the arts subjects (Mutekwel and Modiball, 2007).

The above responses indicate that through their gender perceptions, not only were teachers disseminating their stereotypical gender role biases, but they were also disseminating their expectations for their learners regarding subject and eventual career choices. The above study is relevant to this study since it shows how gender perceptions of teachers are likely to influence female learners' subject choices, roles and career choices particularly because e-learning is historically viewed as technology, which was set aside for males.

From the discussion of teachers' gendered perceptions on gendered occupations, it appears as if teachers cause stress to female learners, not only in terms of the subject choices, but in the career implications of the subject choices as well; discriminate against female learners who excel in subjects that are considered "male"; and perceive qualitative and quantitative subjects in terms of gender.

In view of teachers' perceptions still fixated on viewing historically male vocations as no place for females, critical pedagogy, according to Silverman (2006), insists on a schooling system that promotes learning equally for all learners. In such a case, such equal opportunities would include exposing all genders to curricula that will lead them to a career of choice not restricted by race, class, and gender boundaries (*ibid*). According to Kincheloe (2008), critical

pedagogy's focus is also on challenging inequalities of power in schools, false myths of opportunity and merit for many students, and about the way belief systems become internalized to the point where learners and teachers abandon the very aspiration to question issues.

The section above discussed teachers' influence on female learners with regard to roles, subjects and vocations. The discussion below proceeds to the second factor identified to affect e-learning proficiency in female learners, namely, the curriculum.

3.3.2 The curriculum

According to Jack (1997), Mlitwa and Koranteng (2013) and Prince (2007), the curriculum is one of the factors that cause lack of success in e-learning, if not properly implemented. According to Mwamwenda (2010), the school curriculum is ever-evolving and is divided into: the hidden curriculum (which is covert), the academic curriculum (formal school curriculum), and the extramural curriculum (sports and hobbies). For the purposes of this study, only the hidden curriculum and the formal curriculum will be discussed because the extra-curriculum does not serve the purpose of the study. In addition, e-learning curriculum responsiveness will be discussed. The importance of the discussion of the curriculum for this study is that it allows the study to determine whether the curriculum in the e-learning classroom possibly affects the e-learning proficiency of female learners. The hidden curriculum is discussed below as the first curriculum type that, possibly, affects e-learning proficiency of female learners.

3.3.2.1 The hidden curriculum

Hidden curriculum is described by critical pedagogy theorist, Burrow (2005) as a covert type of curriculum that occurs in schools and is not easily seen, unless one is part of the school. The hidden curriculum may be driven from various agenda positions, such as race, gender, and class (*ibid*). For the purposes of this study, only hidden curriculum that pertains to gender is discussed in this section. Burrow (2005) builds on this explanation and states that the hidden curriculum is prevalent in schools that exists within patriarchal societies. According to Delamont (2009), patriarchal-driven hidden curricula in schools are actively responsible for perpetuating and reinforcing the behavioural differences

and proficiency gaps between male and female learners. Burrow (2005) adds that regardless of the forms that the general school curriculum takes, its content is often presented to learners in a manner that emphasizes their gender role differences through the hidden curriculum. As a result, as per Burrow's (2005) argument, male learners and female learners receive different messages in schools, and such messages mostly disadvantage the female learners due to the patriarchal nature of the messages. In the case of this study, it was important to determine if such gender-driven hidden curricula do exist and how they, perhaps, affected e-learning in female learners.

Burrow (2005) further asserts that as a result of such hidden curricula, schooling fails to afford female learners opportunities for competing on an equal footing with their male counterparts and influences female learners' education, career aspirations, and subject choices, particularly historically male-dominated subjects such as Mathematics, Science and Technology.

In the South African context, according to Mwamwenda (2007), in the apartheid curriculum, gender stereotyping was cultivated around the way in which textbooks depicted females and female learners. Females generally were portrayed against a domesticated background washing dishes and sweeping the yard, while males were portrayed as doctors, office workers and sports people (*ibid*). Mwamwenda (2007), therefore, contends that stereotypes influenced the way in which female learners and male learners chose their subjects and ultimately, their careers. Mabandla (1991) asserts that this curriculum was designed to educate males for the public sphere. Mabandla (1991) also claims that both the content and the structure of schooling and training were designed to prepare young people for a male-dominated world.

3.3.2.2 The formal curriculum

The formal curriculum is described by Mwamwenda (2007) as formally communicated teaching and learning and content presented in the form of materials such as textbooks, posters and even software. As discussed above under the hidden curriculum, the formal curriculum is one of the vehicles mostly used to drive the agenda of the hidden curriculum. Haberman (1972) cited in Cohen, Manion and Morrison (2011) asserts that curriculum is controlled, pre-

determined and is a tool used to drive societies' power agenda in schools. Regarding the above assertion, Mutekwel and Modibal's (2012) research cited in this chapter revealed that gender bias exists in curricular materials. Their study reports that visuals displayed on the classroom walls by the teachers portrayed males and females in traditionally gender stereotyped occupations such as females cooking and males going on hunting trips. Mutekwel and Modibal (2012) report that the central characters embodied in the posters were overwhelmingly masculine, with females generally wearing aprons, cooking and looking after children. The influence of such a gender stereotypical formal curriculum, according to Madikizela (2014), shapes the ways in which male and female learners are believed to perform in various subjects such as Mathematics, Science, and Technology. In this study, this observation is important as it would inform how the curriculum in e-learning is presented and how it, perchance, affects proficiency in female learners.

Madikizela (2014) adds that the afore-mentioned position of the curriculum stems from the traditional thought that male students are naturally better at quantitative and practical subjects, such as Maths, Science and Technology; female students were traditionally considered to be better at qualitative subjects, such as English. Xaba (2009) points out the flaws in this traditional notion of the formal curriculum by arguing that present research has disputed this traditional school of thought with claims that female learners' underperformance in these subjects has more to do with societal stereotypes than intelligence.

In view of the above discussion on formal curriculum, critical theorist Giroux (2008: 51) points out that the formal curriculum should include what is termed the "language of critique" and a "language of possibility". This author emphasizes that both are essential to the pursuit of social justice for all learners, regardless of their gender. Giroux (2008) claims that through engaging learners in the language of critique, learners could unlearn accepting all that they learn at face value and trust their critical judgement in learning. In addition, this author argues, if learners apply the language of possibility in their thinking, they could break loose from chains tying them to a sense of futility, regardless of their gender. In this study, Giroux's claim (2008) is very important since it could be

utilized to empower female learners in the e-learning class not to limit their capabilities so that they can be proficient in e-learning.

The discussion above was focused on the informal curriculum, which is covert, together with the formal curriculum, which is overt; below is a discussion of curriculum responsiveness in e-learning.

3.3.2.3 E-learning curriculum responsiveness for different genders

Discussion of curriculum responsiveness in e-learning is significant because it provides this study with discourses regarding how e-learning has to respond to different genders to drive its success. In this study, these discussions shed light into how a curriculum that is not responding to the gender context might affect e-learning of females.

According to the e-Learning Africa report (2009), there is increasing evidence that female learners benefit from Science and Technology curricula that emphasizes hands-on activities and application to everyday life and the environment which reflects their critical role in health, finance and economy in the world.

In addition, the afore-mentioned report mentions that many studies show that female learners appear to be “turned off” early on by the intensely masculine nature of characters used in e-learning classrooms. Bissell *et al.* (cited in Isaacs, 2007) explain that as a result, female learners tend to reject computer games as violent, redundant, and tedious. The above-mentioned authors continue that female learners also tend to, therefore, be less comfortable with computers than male learners due to the non-social, technical obsession they see in their fellow male peers.

The next factor that may possibly affect e-learning proficiency in female learners is infrastructural support, and this is discussed below.

3.3.3 Lack of support for female learners

Gurumuthry (2009) argues that e-learning, particularly for females, is plagued with lack of infrastructural support. The above-mentioned author clarifies that the support he refers to is not only limited to computer access. Computer access,

although important, is not useful as long as support such as guidance and skilling regarding technology are not in place.

Rathgeber and Ofwona (2004) support the claim above, saying that most e-learning initiatives have gender gaps, and these vary according to local context. Rathgeber and Ofwona (2004) further assert that research on technology-based projects found that a majority of those underwritten by major donors do not consider gender a significant part of project design and fail to address the requirements of females in the targeted communities by ensuring access to technology. Rathgeber and Ofwona (2004) further claim that gender is frequently not explicitly mentioned as an area of importance in project proposals, and those involved in project planning lack gender awareness or simply choose to ignore gender as an issue in technology projects. In this study, the argument above is valuable as it informs how the researcher might make recommendations to the Walter Sisulu University Project which forms the background of this study.

Jack (1997) reports that lack of relevant and local content, together with lack of funds and skills to package content for technology used by females affects e-learning proficiency in female learners. Another identified area where there is lack of support for female learners refers to how society, in general, thwarts efforts by female learners to venture into technology careers.

The above-mentioned lack of support for female learners is supported by Chatty's (2000) field research showing that 40% of the female respondents in his study of gender-focused e-learning initiatives viewed family responsibilities and socio-cultural norms as being instrumental in prohibiting them personally from developing their e-knowledge. The research also indicated that this obstacle affects females of all ages, and that they are always burdened by family responsibilities.

The political stance of liberal and social feminists working with mainstream educational concerns which challenge formal, legalistic inequalities would find the above statistics problematic. This is because the former, according to Connor (1999), presents an argument for politics of access, and a limited number of females in the technology field implies less opportunities for females.

The latter would find these statistics problematic as they espouse for labour equality for all genders (*ibid*).

A liberalist perspective would, therefore, emphasize doable reforms towards a substantial number of small-scale initiatives in e-learning classrooms and schools aimed at persuading girls to opt for previously male-dominated subjects such as Science, Maths, and Technology (Kelly, 1988).

In addition to the above discussion, lack of career counselling and mentorship was viewed by Jack (1997) as another area that has support gaps for female learners which, possibly, affects their proficiency in e-learning. For this study, the relevance of this discussion lies in determining whether such support exists for female learners to be proficient in e-learning. According to Mahali (2007), lack of career counselling in rural and township schools often affects female learners' decisions to join the IT and science sectors. Mahali (2007) adds that female learners have misconceptions about careers in IT, and this could be demystified through career expos. The above-mentioned author further claims that in the Eastern Cape such expos are few and far between and are mostly held in urban areas, and this poses transport problems for rural school learners, where this study is conducted.

Mabovula (2010) maintains that the subject Life Orientation (LO), which could be another vehicle to influence female learners to venture into traditionally male-dominated fields, cannot realistically cover all aspects of all careers. It is therefore helpful that some companies have stepped in to address the issue in certain schools. According to the Mail & Guardian (2010), currently in South Africa companies such as Cell C and Tracker sponsor and promote the successful *Take a girl-child to work* initiative; such an initiative promotes a one day mentorship session of female learners where they receive first-hand experience by shadowing professionals from different sectors. Unfortunately, according to the Cell-C (2010) Report (cited in the Mail & Guardian, 2010), these initiatives are still more accessible to the urban rather than the rural school learners who undoubtedly need it more.

Ajjayi, Igorode & Aderemi (2008: 41), in their study in Nigeria, asked both females and males why, in their opinion, there is such a low participation rate for

females in IT careers. Some reasons given by the males were that IT and IT-related careers were unsuitable for the female personality because such jobs were too strenuous for females and demanded absolute dedication, perseverance, and consistency - attributes males believe females lack. In the same study, females gave similar responses, with the added element that IT “over-exposes” young females to the Western style of life, making them appear too “worldly-wise”, and thereby limiting their chances of marriage.

From the above discussion on lack of support for female learners with regards to technology use and e-learning, it appears that social norms and barriers exist for female learners, and this is likely to affect their proficiency in e-learning.

3.3.4 Lack of peer collaboration

As discussed under social constructivism above, peers are seen as playing a major role in facilitating learning. In the case of this study, peer support is viewed from a gender perspective, that is, the researcher is interested in determining how lack of support from male learners possibly affects girls' proficiency in e-learning.

According to Mitra *et al.* (2010), gender-based peer support in an e-learning classroom is vital for learner success. The afore-mentioned author bases these claims on the findings of their study regarding how learners of different genders foster support to one another. Males are more positively predisposed toward computers and tend to use computers more than females because of societal and parental encouragement for males to use computers (*ibid*). Mitra *et al.* (2010) claim that in their study they took advantage of male learners' advanced skills in e-learning in fostering a constructivist approach to e-learning. These authors state that they paired male learners with female learners in order to realize Vygotsky's notion of socio-constructivism, discussed earlier in this chapter, whereby the knowledgeable other assists fellow students to a point where these students can work independently. The results of Mitra *et al.*'s (2010) study showed increased e-learning proficiency in female learners through peer support from male learners.

A similar study (as briefly discussed in Chapter 1) by Mlitwa (2009) reports that in Gauteng Province of South Africa findings revealed that parents of learners of a school where he conducted research bought technology gadgets mostly for their male rather than their female offspring. This, according to Mlitwa (2009), afforded the male learners an unfair advantage in the e-learning classroom since they were more computer literate than their female peers. Mlitwa (2009) continues that this computer knowledge head-start, on the part of male learners, seemed to encourage teachers to warm up to the male learners more than the female learners as the male learners were perceived by the teachers as bright, computer-savvy and initiative-taking.

In Mlitwa's (2009) and Mitra *et al.*'s (2010) studies, it is observed that the teachers had different gender perceptions regarding e-learning. In the former study, they were unwilling to use male learners' expertise to assist female learners, and in the latter they assisted female learners to improve in their proficiency through pairing them with male learners. In this study, it is therefore considered that gender perceptions of the teachers and of the learners regarding e-learning would have to be positively inclined towards such peer support for the e-learning proficiency of females to develop. In addition, the researcher upholds the peer collaboration that occurred in Mitra *et al.*'s (2010) study wherein male learners who are more technologically advanced than female learners assist to promote e-learning proficiency of females.

Mlitwa's (2009) and Mitra *et al.*'s (2010) studies above clearly show that teachers and learners would have first to develop positive attitudes towards gender-based peer support before such a constructivist approach to e-learning can be implemented in any e-learning class. Tolhurst (2004) cited in Muhuro (2009) rightly points out that in his study on e-learning in a constructivist classroom, the predominant factors affecting e-learning proficiency were epistemological beliefs of students, school culture, and gender, and these are factors that are interrogated through the research tools of this study to determine the extent to which they affect the e-learning proficiency.

Wainana (2008) adds to this argument by raising the issue that upbringing of different genders regarding technology and e-learning is influential in any e-

learning class, regardless of the amount of socio-constructivist effort invested in that class. For this study, the point made by the above author is important because it is vital to find out if the female learners' background does, in any way, affect their proficiency in e-learning. The afore-mentioned author reports that in Kenya, until the recent influence by the Technology week for Female Learners campaign championed by the United Nations, most females were brought up to believe that computers were meant for males only. Wainana (2008) explains that males generally received priority of use in internet cafés, especially in the Kisii and highlands areas of Kenya, and in most schools in Nairobi, only male teachers had the authority over computer laboratories in those schools which had computers. The issue of the individual's background is very important in this study because it would create a better understanding regarding the origin of the gender perceptions of both teachers and learners, that is, do these participants share a similar background to those in Kenya regarding gender perceptions towards use of technology (computers)? If that is the case, would this be one of the factors that affect proficiency of female learners in e-learning?

This section explored lack of peer support to female learners as a factor that, conceivably, affects e-learning proficiency in female learners. The discussion revealed that as long as both teachers and learners do not prescribe to peer support across genders, particularly in cases where male learners are the *knowledgeable others*, females will struggle to be proficient in e-learning. The section below brings this chapter to a conclusion through synthesizing the main discussion points.

3.4 Chapter synthesis

This chapter presented debates on social constructs: gender, pedagogy and e-learning within the theoretical framework of social constructivism with the view to implicitly addressing questions a) and b) below, and explicitly addressing question c) below:

a) What are the e-learning teachers' gender perceptions?

b) To what extent do the e-learning teachers' own gender perceptions influence proficiency of female learners in e-learning classes?

c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

In addition, this chapter served to shed light on the notion of how scholarly literature can inform gendered perceptions of e-learning from a combination of constructivist, critical pedagogy and feminist perspectives.

As the first construct, gender was discussed in terms of how the *femaleness* of female learners affects their e-learning proficiency due to the factors discussed above. The second construct, pedagogy, was discussed in terms of how education, specifically e-learning, is structured in a way that is seen by various researchers as not conducive to promote e-learning proficiency in e-learning. The last construct, e-learning, was discussed with regards to how the education system adopts a one size fits all approach and does not clarify how e-learning should be taught and supported in schools.

From the overall discussion in this chapter, it appears that various e-learning practitioners agree that teachers, peers, curriculum and female support affect e-learning proficiency in female learners. All the factors raised above seem to indicate critical pedagogy's concerns regarding how schools are used to drive agendas of injustice and, in this study's case, against female learners in the e-learning classes. With regards to the main theoretical framework adopted in this chapter, literature shows that social constructivism is considered as a strong basis of e-learning and teaching wherein peer collaboration contributes immensely to learning through the knowledgeable other (Mlitwa & Koranteng, 2013). In this study's context, the researcher, whilst embracing the fundamental contributions of social constructivism to e-learning, is, however, realistic regarding the limitations that the rural, semi-rural, traditional and patriarchal nature of the schools participating in this study may pose to this approach, particularly for female learners to attain proficiency in e-learning. It is, therefore, important to point out that the questions posed to the teachers (during interviews) regarding social constructivism were grounded on factors such as

pedagogy and gender perceptions of teachers that might negatively affect e-learning perceptions of female learners.

Various debates engaged in this chapter regarding factors that affect e-learning proficiency of female learners show tensions between liberal educational feminism which works with politics of access and concerns regarding curriculum reform and student performance (outcomes), and, on the other hand, 'difference feminism' namely, radical feminism, which challenges patriarchal, gender, class and racial systems of control (Ralphe, 2011). Consequently, in view of the factors discussed in this chapter, such as lack of support for female learners that affect their e-learning proficiency, it is insufficient to ensure that female learners gain access to an e-learning class (liberal feminism); instead, it is vital to ensure that they garner similar support given to male peers (radical feminism) by the teachers. In addition, Keller (2003) insists that radical feminists believe that gendered roles perpetuated by factors such as the hidden curriculum are designed to 'trap' female learners into adopting a manner of behaviour that a patriarchal society can accept through e-learning teaching strategies that favour male learners.

Marxist and socialist feminist perspectives are, however, in agreement with the critical pedagogy position which argues that teachers and schools, in general, are the main factors that affect success in learners (Weiner, 1994). Critical pedagogy's argument is that the education system tends to focus on preparing learners for the world of work, and in a patriarchal society such as the one where this study takes place, teachers tend to influence learners towards gender-determined roles and careers (Ralphe, 2011). Such influence is profound regarding how female (and male) learners accept their assigned roles in the e-learning classroom as their minds become set to fulfil roles that are consistent with their gender (Enns & Sinacore, 2005).

Postmodernist and post-structuralist feminist views seem to offer a solution to the above issue of gender role-specification in schools, particularly in the e-learning classroom (Ralphe, 2011). A primary issue of this feminist position is promoting critical awareness of the gender perspectives in schools and in educational discourses (Weiner, 1994). This feminist position suggests adoption

of a process whereby learners are treated as critical individuals in their quest for learning and not just as females or males (*ibid*) in an e-learning classroom. Learners need to be helped by teachers to separate themselves as individuals from unconditional acceptance of the conditions of their own existence (Ralphe, 2011). Once this separation is achieved, then learners may be prepared for critical re-entry into an examination of everyday life (*ibid*). In an e-learning classroom environment that achieves such liberating intent, one of the potential outcomes is that the learners would assume more responsibility for their learning (Kincheloe, 2008); power would, thereby, be distributed amongst the different genders (*ibid*). The postmodern and post-structuralist views raised above are fundamental for this study to determine ways in which such power distribution could contribute to e-learning proficiency of female learners.

In conclusion, the researcher is of the opinion that these varying theoretical perspectives on gender, pedagogy and e-learning are ongoing scholarly debates that serve to intensify problematizing issues of social justice as espoused by critical theory. They shed light, through their different positions, to inform possible gendered perceptions in e-learning since this study explores a sensitive issue, namely, gender perceptions, particularly in patriarchal communities where this study is located.

The next chapter, Chapter 4, discusses the research methodology utilized in this study.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

In the previous two chapters, an all-inclusive literature review provided readers with the theoretical frameworks and discussion of research works that pertain to this study's research objective. Moreover, the afore-mentioned demonstrated the researcher's understanding of the discourse in the fields of e-learning and gender. This served the purpose of concretizing the point that there exists concrete theoretical bases for what the researcher is proposing to do, how this study fits in with what has already been done, how the study has significance, how the study will reveal some gaps, and how the study will lead to new knowledge. This study is aware of various studies that have been done regarding the issue of gender and e-learning, but advocates to contextualize this within rural and semi-rural schools in the Eastern Cape.

This chapter presents the research methodology utilized in this study. Chapter 4 begins by presenting the research objectives of the study and then moves on to research paradigms that ground this study ontologically and epistemologically as per Mouton's (2010) assertion. The next part is a discussion of the study's research design before illuminating the research methodology. The strategy for collecting data, as well as the description of data collection instruments is also examined in this chapter. This is followed by discussion of sampling techniques as well as the rigour (qualitative data) and reliability and validity (quantitative) of the data collection instruments. Lastly, ethical considerations are discussed. The reason for the researcher to draw a distinction between qualitative and quantitative methods in the above sentence is that, according to Brink, van der Walt and van Rensburg (2013), qualitative methodologies reject the notion of reliability and validity in favour of rigour of the data collection instruments. The following objectives guided the data collection process of this study:

4.2 Objectives of the study

This study sought to determine:

a) the e-learning teachers' gender perceptions;

b) the extent to which teachers' own gender perceptions influence the e-learning proficiency of female learners; and

c) factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools.

4.3 Research orientation

According to Marlon (2009), a research orientation assists the researcher to think clearly about his or her research process. Marlon (2009) explains that research orientation is, therefore, called research orientation due to its ability to orientate both the researcher and the reader around the maze of the research concerned. In addition to the research orientation, an important proponent of research methodology is the research paradigm. According to Carson (2001), research paradigms consist of four elements, and these are: ontology, epistemology, axiology and methodology. These elements are discussed further below.

a) Ontology (theory of reality): Carson (2001) defines ontology as the manner in which each researcher has assumptions or beliefs regarding nature or reality. Given the sensitive nature of this study, it was important that the researcher is constantly aware that there are multiple realities that are likely to break out into multiple interpretations throughout the study. Although the researcher undertook this research with her own assumptions regarding issues of gender and e-learning, literature that she engaged with influenced her thought processes even further. At the time of analysing the data, the responses gathered on the female learners' (and even the male learners' and teachers') perspectives had the capacity to affect the researchers' understanding of what it means to simply "be", and to step back she had to utilize a recommendation from Mabovula (2010: 28) to "bracket" her emotions and be objective.

b) Epistemology (theory of knowledge): Carson (2001) claims that the researcher has to reflect on how his or her assumptions influence his/her belief about the nature of knowledge. This author suggests an inquiry regarding what the relationship is between the inquirer (knower) and that which is known. Questions that the researcher reflected on throughout this study were: What are

the values that need to be acquired by both the learners and teachers in order to facilitate success in e-learning for female learners?

c) Axiology: Mouton (2010) defines axiology as the role and place of the researcher's personal values and ethics in the research process. The beliefs and values of the researcher, according to Mouton (2010), should be made explicit so that respondents and readers know the context in which the research was conducted. As a researcher, it is important to present oneself in a transparent and fair manner, according to Babbie (2013). It is also important to establish rapport with the research participants, conducting the research ethically, and respecting the participants' value systems whilst at the same time making an effort to interpret and present findings professionally (*ibid*).

d) Methodology: Methodology is defined by Fidyck (2009) as the theoretical framework or lens by which researchers view the data after having collected it using some available method. Fidyck (2009) expatiates that method and methodology are not interchangeable and cites an example of Freud who had a methodology but found it difficult to publish his method. To explain the concept of methodology philosophically, Fidyck (2009) states that researchers collect data through interviewing, observation, and various other methods of capturing data and use a methodology for a particular way of seeing or understanding the text or hearing into what the person is saying through examining their epistemological and ontological value systems.

Given the sensitive nature of the research topic of this study, the researcher, in addition to determining her understanding, beliefs and values towards the topic, engaged in various reflective exercises as a means of engaging with the data collected through the one-on-one interviews, focus group interviews, and surveys. The reason for this was for the researcher to move back and forth from the present collected data and her previous philosophical perceptions, values and even biases regarding the collected data.

Since this research is a mixed methods research, the approaches that were used were chosen to respond to QUALI-quantitative mixed methods as per Babbie (2013). Babbie (2013) explains that capitalizing the word *quali* is popularly used by the researchers to signify that the research is steeped towards qualitative

methods rather than quantitative methods. These approaches are, therefore, interpretivist for the qualitative methods, and positivist for the quantitative methods. Interpretivism is discussed below.

4.4 Qualitative paradigm: Interpretivism

Mouton's (2010) explanation of interpretivism resonates and supports the research that was undertaken in this study. Mouton (2010) explains that interpretivism, mostly used in qualitative research, is based upon general characteristics such as understanding and interpretation of daily occurrences and social structures as well as the meanings people give to the phenomena. According to Denzin and Lincoln (2010), researchers from an interpretivist orientation seek to understand phenomena and to interpret meaning within the social and cultural context of the natural setting. The above point is echoed by Cantrell (2003) who adds that events are understood through the mental process of interpretation which is influenced by and interacts with social contexts. Cantrell (2003) further points out that in order to gain the knowledge demanded by the interpretive paradigm, narratives should be solicited and constructed through narrative enquiry, which is discussed below.

4.4.1 Narrative enquiry in the interpretivist research

This study used the narrative enquiry to elicit data from the interviews. The idea behind the use of narratives was to discover the untold stories of educators and learners, or part of what is actually taking place in the e-learning classroom and the school generally with regards to gender perceptions and how these could affect the performance in e-learning. According to Mabovula (2010), narrative enquiry yields data that recognises that all persons have a voice and are different, and that they have a right to participation in public life.

Mabovula (2010) further posits that some narrative enquiry data assists in situations where the assumptions, experiences, and values of some members of the society dominate, and those of others that are misunderstood, devalued, or reconstructed to fit the dominant paradigms. Young (2000) (cited in Mabovula, 2010) introduced the concept *narrative enquiry* to augment the opportunity of understanding the contending perspectives of different people, albeit in terms of

values, experience, culture, language and ethnicity. Young (2000) is of the opinion that narrative enquiry can create opportunities for the marginalised to tell their individual stories. Young (2000) further claims that narrative enquiry serves imperative functions in democratic communication to foster understanding among citizens.

According to Hall and Carter (2007) when participants narrate their stories, broad reflections on these stories develop a normative language that names the prejudice that they are exposed to and explains why this kind of suffering can be classified as an injustice.

Hall and Carter (2007) also believe that narrative enquiry advances discussion across difference in several ways and believe that radical injustice can occur when those who suffer unjust harm or oppression lack the terms to express a claim of injustice within the prevailing normative discourse. Young (1999), in pointing out the benefits of narrative enquiry, invented the term *differend principle* which explores the manner in which a group that suffers a particular harm or oppression can move from a situation of total silencing and omission to its public expression. Mabovula (2010), therefore, suggests that telling life experiences is often a vital bridge in cases between the voiceless experience of being victimized and political arguments about justice. Mabovula (2010) also believes that those who experience the wrong, and perhaps some others who sense it, may have no language for expressing the suffering as an injustice; nevertheless, they can tell stories that relate a sense of wrong through narrative enquiry.

For Manning (2010), narrative exchanges give reflective voice to positioned experiences and help similar groups to give an account of their own individual identities in relation to their social positioning and their kinship with others. Manning (2010) further asserts that people often use narrative as a means of debating their situation by reflecting on the extent to which they experience similar problems and what political remedy they might propose for themselves. Xaba (2009) also puts forward the argument that narratives do not only relate the experiences of the protagonists, but also present a particular interpretation of their relationships with others. Xaba (2009) further believes that each person

not only has an account of his/her own position, actions and values, but s/he also exhibits the situated knowledge available from different perspectives, thus producing a collective social wisdom not available from any other position.

In keeping with the argument on the benefits of narrative enquiry, Young (1999), therefore, maintains that narrative enquiry has the power to contribute to political debates through the social knowledge it offers regarding the likely effects of policies and actions on people in different social locations. For Young (1999), stories of harassment or abusive treatment coming from people who are relating to others with a different experience are crucial to the process that brings about citizen emancipation. Having discussed interpretivism as an approach used in this study to respond to qualitative methods, the section below proceeds to positivism as an approach that responds to the quantitative methods used in this study.

4.5 Quantitative paradigm: Positivism

Carson (2001) explains that positivist researchers are the types of researchers who take a controlled and structural approach in conducting research. Babbie (2013) explains that positivist researchers also attempt to remain detached from the participants of the research by creating distance between themselves and the participants. These researchers add that it is vital to remain emotionally neutral so as to make clear distinctions between reason and feeling as well as between science and personal experience. Carson (2001) claims that according to the positivist ontology, there is a single, external and objective reality to any research question regardless of the researcher's belief, and therefore, it is important to clearly distinguish between fact and value judgement. In this study, positivism was utilized in the quantitative data collection and analysis. This analysis was done scientifically through statistical package software for factual data generation.

Below, the discussion proceeds to the research design of this study which is both *exploratory* and *descriptive*.

4.6 Research design: Exploratory and descriptive designs

According to Leedy and Ormrod (2001), research design is the strategy, the plan and the structure of conducting research. It provides the overall framework of data collection. Selection of the research design for this study was informed by the research objectives of this study. A descriptive and exploratory research design was used to explore and describe the perceptions of teachers and learners regarding how the teachers' perceptions affect the e-learning proficiency of female learners.

The exploratory research definition used for this study is that of Polit and Beck (2006: 19) which states:

Exploratory research is undertaken when a researcher plans to shed light on the various ways in which a phenomena and its underlying processes are manifested.

In this study, the researcher **explored** the gender perceptions of teachers and learners regarding how these had a potential to affect female learners' proficiency in e-learning.

The descriptive design definition that is used for this study is by Polit and Beck (2006: 20) which states:

Descriptive research is an innovative tool for researchers. It presents an opportunity to fuse both quantitative and qualitative data as a means to reconstruct the "what is" of a topic.

The researcher **described** the gender perceptions of teachers and learners regarding how these could affect female learners' proficiency in e-learning. Using a descriptive research design requires the use of specific forms of data collection. This can include case studies, observation or surveys.

4.7 Selection criteria of schools that participated in the study

The target population of this study, to reiterate, was identified on the basis of involvement in a computer assisted language learning project in 2011. Firstly,

the selection of the schools was influenced by external criteria which were imposed on the schools by the Eastern Cape Department of Basic Education.

4.7.1 Description of the selected schools

The six high schools which participated in the study were amongst the first ones to benefit from the e-learning rollout in the Eastern Cape Province in terms of the White Paper on e-education (DoE, 2004). In addition, these schools were among the ten schools which received donated software from Walter Sisulu University with the aim of helping the learners to improve proficiency in basic computer and grammar skills.

Secondly, the selection of the six schools was based on the results of an internal evaluation of all participating schools by Walter Sisulu University. The results of this evaluation showed that learners from the six schools in this study (out of a total of ten schools), showed no noted improvement of proficiency in basic computer and grammar skills following participation in the afore-mentioned project for one year. Of concern regarding the evaluation report was the fact that the female learners in all six schools showed very much lower proficiency than the male learners (see appendix D). The scores presented in appendix D were solicited from post project assessments of basic computer skills and grammar that were administered in all participating schools at end of the project, which was conducted over 12 months.

Thirdly, the schools that were selected were those which had teachers who received the initial e-learning training as per the strategic plan of the e-learning rollout and on the Educational software that was used in the project. Table 4.1 below shows that all schools had computers, trained teachers, and that three schools were in rural areas, two in informal settlements, and one in a township.

Table 4.1: Demographic spread of schools based on resources

School	School location	No. of teachers trained in e-learning	No. of computers
1	Rural	1	30
2	Informal settlement	1	27
3	Township	1	40
4	Informal settlement	1	21
5	Rural	1	27
6	Rural	1	22

Given the sensitive nature of the phenomenon being researched, for purposes of anonymity the names of the schools have been withheld; the schools are referred to as school 1, 2, 3, 4, 5 and 6. This was done in accordance with the guidelines governing research ethics as per Denzin and Lincoln (2010), where it is cautioned that the portrayal of places and persons in forms that subject them to the possibility of recognition should be avoided, especially in research that covers phenomena of a sensitive nature.

The technique, therefore, that was used to select the schools is called the purposive or judgmental sampling technique which, according to Mouton (2010), involves conscious selection of certain participants to be included in the study by the researcher. The main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable the researcher to answer research questions. Guba (2001) explains that a researcher needs to be clear that his/her choice of sampling technique will allow him/her to answer the research questions.

Guba (2001) further explains that there are six types of purposive sampling techniques, and these are: *the maximum variation sampling, the homogeneous sampling, typical case sampling, extreme (or deviant) case, critical case sampling, total population sampling* and *expert sampling*. In this study, the researcher used **the extreme (deviant) case purposive type sampling techniques**. In addition to the selection of the schools, the researcher discusses

below how the teachers and the learners were selected to participate in the study.

4.8 Sampling of participants

According to Mouton (2010), in both quantitative and qualitative studies, researchers have to decide on the number of participants to select (sample size), and how to select these participants (sampling scheme).

4.8.1 The teachers

As mentioned before, the schools, teachers and the learners were selected to participate in this study because of their involvement in the project. All six teachers who participated in this study also participated in the Walter Sisulu University project study, therefore, the researcher did not have to make a choice with regards to which teacher to choose and from which school. Out of the six teachers, two were males and four were females. Since the teachers had already been chosen to participate in the project by the DBE, the researcher used them as the already available participants. All teachers taught English, offered e-learning as an add-on component, and a variety of two additional subjects from grades 9-11. These teachers, as mentioned before, received training in offering e-learning, and additional training on the educational software that the project was based on. Table 4.2 summarizes demographic information on the teachers below.

Table 4.2: Demographic spread of participating teachers

School	Teacher	Gender	Age	Teaching experience	School location
1	A	Female	46 yr old	18 years	Rural
2	B	Female	26 yr old	4 years	Informal settlement
3	C	Male	35 yr old	7 years	Township
4	D	Male	40 yr old	16 years	Informal settlement
5	E	Female	44 yr old	12 years	Rural
6	F	Female	28 yr old	5 years	Rural

4.8.2 The learners

Initially, this study targeted a total of one hundred and sixty four (164) learners in all six schools, as this was the total population of students who had participated in the afore-mentioned project. Between the period of the project administration (2011) and the time of data collection (2013), some students had dropped out or had changed schools; as a result, the number of learners had dropped down to one hundred and forty (140). The number of learners who eventually participated in this study was one hundred and nineteen (119) because these were the ones who brought back and submitted signed consent forms from parents.

Out of one hundred and nineteen (119) learners, sixty nine (69) were female, and fifty (50) were male. In 2011, all the learners were in grade 9 (nine), and at the time of data collection, 13% of these learners were repeating grade 10 (ten), whilst 87% were in grade 11 (eleven). Table 4.3 below shows how these learners were spread throughout the schools. It should be noted that although the number of learners seems small in the e-learning class, the number, in reality, is big since these learners have been joined by learners that did not participate in the study. The researcher's interest in this study lies in those learners who participated in the 2011 project.

Table 4.3: Learner profile of the study participants

Category	Gender	School 1	School 2	School 3	School 4	School 5	School 6
Total number of participants	Female learners [69]	12	11	12	14	12	11
	Male learners [50]	07	08	10	09	08	08
Average Age group	Female learners	18yrs	20yrs	19yrs	19yrs	18yrs	19yrs
	Male learners	19yrs	18yrs	18yrs	19yrs	20yrs	18yrs
Home Language	IsiXhosa						
School location	n/a	Rural area	Informal settlement	Township	Informal settlement	Rural area	Rural area

Since this research's focus is on gender issues, it was vital for the researcher to have a clear view of the gender spread of the group. The gender of the participants was important in understanding the issues that contributed to the gap in computer proficiency skills among the students of different genders in the selected schools. The sample group consisted of 58% female (n=69) and 42% male (n=50) learners.

Table 4.3 also shows that all the learners were IsiXhosa first language speakers who could read, understand, and write in English. The researcher allowed translation whenever this was needed. In addition, out of the one hundred and nineteen (119) learners, none were under eighteen (18) years of age.

Due to ethical reasons, and consultations with the school authorities, the names of the learners who participated in this study were replaced with identifier pseudonyms to ensure the confidentiality, privacy and integrity of the school and participants. The learners' names were allocated numbers in the attendance register from 1 to 119.

4.8.3 The district official

The district official was selected though using a convenience sampling technique. Denzin and Lincoln (2010) explain that convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. In this case, the district official was the only one whom the researcher had access to and who was available to participate in this study. The purpose of including a district official in this study was to source data that would shed light on the issue of support provided for the teachers who offer e-learning by the Provincial Department of Basic Education (DBE).

4.9 Methods of data collection

4.9.1 QUALI-quantitative research methods

This study, as mentioned before, used both the qualitative and quantitative methods of data gathering. These methods were used sequentially, with the qualitative methods taking precedence over the quantitative. According to Creswell (2011), there are advantages in using mixed methods in research as against using singular methods. The first advantage, according to Creswell (2011), is that mixed methods research is versatile, and the range of data collection instruments it uses provides better understanding and explanation of results than using qualitative or quantitative instruments alone.

Secondly, Burke, Johnson and Onwuegbuzie (2004) quoted in Ralphe (2011) point out that mixed methods focus on answering the research question without being constrained by a single method which leads to a more wide-ranging comprehension of what is being researched. Finally, Creswell (2011) argues that the use of mixed methods allows for triangulation. Below is a discussion on

the data collection instruments that were used in this study. For purposes of clarity, these methods are discussed separately. The first method discussed below is the qualitative method because this method was used predominantly in this study.

4.9.2 Qualitative research instruments

Cantrell (2003) posits that research instruments are tied to the purpose of the study and the structure of the research design. The most common sources of data collection in qualitative research, according to Creswell (2009), are interviews, observations, and review of documents, and the choice of the research tool is determined by the researcher's framework which guides the nature of the data collection.

Locke, Silverman and Spirduso (2010) explain that of the common sources of data collection mentioned above, interviews are the most predominantly used in qualitative data collection. The person-to-person format is most prevalent, but occasionally group interviews and focus groups are conducted (*ibid*). Primarily, according to Stuckey (2013), there are four types of interviews common in social sciences and educational research, and these are: structured, semi-structured; and unstructured (narrative), and focus group interviews. The main difference between them is the amount of control the interviewer has over the encounter and the aim of the interview (*ibid*).

Qualitative data in this study was collected through two methods, namely: ***unstructured in-depth one-on-one interviews***, otherwise known as ***narrative interviews*** with educators, and ***focus group interviews*** with learners. Focus group interviews are interviews which are held on a specific topic with a small group of people called a focus group. As per Marshall and Rossman's (2006) assertion, this technique can be efficient because the researcher can gather information about several people in one session. These authors further explain that such a group is usually homogeneous, for example, students, an athletic team, or a group of teachers.

The value of choosing such tools for this particular study lay in the fact that the researcher felt that there was need to elicit as much data as possible using a

combination of the two tools, as afforded by their characteristics. The interviews with the teachers were conducted first, and responses from these interviews informed questions asked in the focus group interviews for triangulation purposes. Lastly, focus group interviews with learners were conducted as the most appropriate method to capture the synthesis of their perceptions. In addition, the learners' voices helped the researcher to understand their perceptions more clearly. The two research instruments are discussed in greater detail below.

4.9.2.1 Qualitative data collection: unstructured in-depth (narrative) interviews

Bos and Richardson (1994) maintain that the main purpose of qualitative research, especially for educational researchers, is to identify the problems and processes that affect education. The qualitative data gathering tools used in this study are discussed below, and these are the one-one-one unstructured, in-depth interviews with the teachers and the focus group interviews with the learners.

Babbie (2013) describes unstructured in-depth interviews, otherwise known as narrative interviews, as the type of interviews which are not conducted based on a set of pre-determined questions, but rely entirely on the spontaneous generation of questions in the natural flow of an interaction.

Six (6) teachers and one (1) representative from the District office of the Eastern Cape Department of Basic Education were interviewed in order to determine the teachers' own gender perceptions. From the District office representative, the researcher wanted to establish the extent to which teachers are supported to offer gender-sensitive e-learning at macro level in Eastern Cape schools. Participants were approached on a one-to-one basis by the interviewer. All data was obtained with the full consent of the participants, the school management, and the provincial educational authorities. The aims of the study were explained to the respondents prior to the interviews.

The choice of the unstructured in-depth (narrative) interviews for the teachers was informed by a number of issues. The first issue was the study's research designs that sought to explore and describe the participants' gender perceptions

and how these had the potential to affect female learners' skills in e-learning predominantly through narratives. In addition, since this study was motivated by a research project that used questionnaires as the sole data gathering instrument, it was important to include interviews in this study in order to elicit more relevant data based on the narratives of the participants.

The other issue was that given the narrative enquiry in this study's interpretivist standpoint, the researcher chose unstructured (narrative) interviews to elicit data in order to discover and understand different perspectives, interpretations and reflections of the participants freely and in-depth (Young, 2000). Interpretivists, according to Creswell (2009), argue that research should focus on the respondent's view of the world through the use of unstructured interviews (sometimes known as 'guided conversations or narratives'). Interpretivists, according to Stuckey (2013) claim a number of strengths for this method such as: generating more qualitative information about the respondents' interpretation of the world through established trust; generating more valid information (especially if the respondents can see their input is valued) and allows for probing of deeper meanings; providing more opportunity for respondents to say what they want rather than what the interviewer expects, and all these strengths were important for this study.

The last point that led to the researcher's choice of unstructured (narrative) interviews was informed by the advantages and disadvantages of unstructured in-depth (narrative) interviews as discussed below.

4.9.2.1 (a) Advantages of unstructured in-depth (narrative) interviews

Babbie (2013) explains that unstructured in-depth (narrative) interviews are useful tools for finding out what a person knows, understands and thinks, as well as their attitudes, beliefs and preferences in a flexible manner. Another advantage of unstructured in-depth (narrative) interviews is that of shared experiences in which researchers and interviewees come together to create a context of conversational intimacy in which participants feel comfortable telling their story (*ibid*).

Ramos (1989: 23) states that such intimacy is encouraged by the stance of the “interviewer as a friend” rather than that of an impersonal professional. It is this very essence of trust and conversational intimacy that creates both the potential threats associated with unstructured interactive interviews and at the same time makes them potentially therapeutic as well as essential as data collection tools (*ibid*).

In this study, the researcher began the interview by asking a common question whereby she asked the interviewees to narrate their childhood stories in the context of gender perceptions. These questions are what Spradley (1979: 12) terms “grand tour questions”. In so doing, the researcher based her approach on one of the advantages of the unstructured in-depth (narrative) whereby participants are asked to tell their story as they see it, feel it, experience it, as explained by Marshall and Rossman (2006). As such, the participants determined where to begin the narrative, what topics to include or exclude, the order in which topics were introduced, and the amount of detail.

Locke, Silverman and Spirduso (2010) assert that although researchers play an active role in the unstructured in-depth (narrative) interview process by means of focused listening, they are not the central actors; rather, central to the process are the interviewees who are telling their stories. These authors also state that some researchers do respond, probe, or ask for clarification during the course of the unstructured interview while other researchers wait until participants have concluded their stories before asking for clarification. In this study, the researcher asked clarity questions as the interviews unfolded in order to make the interviews as interactive as possible without the risk of losing vital information by waiting until the end of the interviews to ask questions.

The researcher was mindful of the importance of guiding the interview with as little power assertion as possible (Creswell, 2009) so that the purpose of the unstructured in-depth (narrative) interviews, (to gather information on phenomena of interest to the researcher and significant experiences in participants’ lives) was not lost.

Another advantage mentioned by Denscombe (2007) is that more open and honest answers can be forthcoming in unstructured in-depth (narrative) interviews, in comparison with structured interviews because of the openness of the interaction between the interviewer and the interviewee. In this study, some of the narratives were un-anticipated by the researcher and yielded data that enabled the researcher to gain deeper insight into the issues being explored in this study. The above observation by the researcher resonates with Descombe's (2007) argument that if a respondent feels at ease in the interview, s/he is more likely to open up and provide as much data as possible. Denscombe (2007) goes on to say that unstructured in-depth (narrative) interviews give the interviewer more chance to pursue a topic and explore any further questions that the researcher may still have.

According to Mouton (2010), all facets of research have their advantages and their disadvantages. Therefore, having discussed the advantages of unstructured in-depth (narrative) interviews above, the discussion below points out its disadvantages.

4.9.2.1 (b) Disadvantages of unstructured in-depth (narrative) interviews

According to Mouton (2010), unstructured in-depth (narrative) interviews can develop in all sorts of directions and cautions that the researcher has to develop *a priori* guiding themes in order to guide the direction that the unstructured interview flows towards. *A priori*, according to Denscombe (2007), relates to reasoning or knowledge which proceeds from theoretical deduction rather than from observation or experience. Denscombe (2007) explains further that such a guide should be used minimally to avoid deviating from the openness that causes the popularity of the unstructured in-depth interview.

Another disadvantage pointed out by Babbie (2013) is that unstructured in-depth (narrative) interviews are a lot more time consuming in comparison to other research methods; this is due to there being no set questions, apart from the initial question mentioned in the previous section, and the elaborated narratives make it difficult to determine and enforce a set time. Babbie (2013) explains further that as a result of the above disadvantage, it is difficult to interview a

large sample. In this study, there were six teachers interviewed, thereby the sample of unstructured in-depth (narrative) interview participants was small and manageable.

Denzin and Lincoln (2010) add that data collected in unstructured in-depth (narrative) interviews is also prone to digression, and much of the data collected could be worthless. Denzin and Lincoln (2010) argue that respondents like to present themselves in a favourable light and, therefore, tend to be open about and even exaggerate aspects of their behaviour which they see as socially desirable, and to conceal or minimize aspects seen as undesirable. In this study, the researcher noted that, although the respondents presented a lot of data, somehow, they had enough rapport with the researcher to share many socially unfavourable aspects about themselves during the interviews, and this was a vital aspect of the findings regarding the teachers' gender perceptions probably through the rapport that the researcher established with them. To guard against inconsistencies, the researcher had more than one interview with each one of the participants whereby she called them to ask further clarity-seeking questions.

The last disadvantage of unstructured in-depth interviews, according to Babbie (2013) who states that unstructured interviews can take up a great amount of time, and this may sometimes be costly. In this interview, the unstructured interviews were not costly because there were only six teachers who were interviewed, and the value of the data that the researcher gathered outweighed the time that the interviews took.

Having discussed the first type of qualitative methods used in this study, the discussion below proceeds to the next type of qualitative data-gathering instrument that was used in this study, which is the focus group interview.

4.9.2.2 Qualitative data collection: focus group interviews

According to Bryman (2004), a focus group discussion is a method of interviewing in which several people discuss and comment on personal experience about the topic that is the subject of the research. According to Mwanje (2001), after the in-depth interview, the focus group discussion is the

most popular data collection technique in qualitative research. The reason for this popularity, according to Seale (2006), is that the focus group enables researchers to examine people's different perspectives as they operate within social networks. In addition, according to Seale (2006), through their relatively informal interchanges, focus groups interviews can lead to insights that might not otherwise have come to light through the one-to-one conventional interview. In this study, school authorities allowed the researcher to adopt a focus group discussion approach in order to collect more information from the learners.

During focus group sessions, a researcher is expected to consider several issues. Mabovula (2004) advises that the most important issue to consider is the number of group members who participate in the interview sessions. Mabovula (2004) further maintains that focus group sessions depend on the purpose of the research and the nature of the data required. In keeping with Mabovula's (2004) advice, 119 learners were involved in focus group interviews in this study. These participants were further subdivided into gender-specific groups. Therefore, in each school, there was an average of nine learners in each group.

In conducting the focus group interviews, the researcher heeded Guba's (2001) advice regarding allowing the flow of conversation, using a tape recorder, and allowing respondents freedom to elaborate on responses. There were a total of 119 learners who participated in the focus group interviews. In each school, there were two (2) focus groups divided by gender. The reason for establishing gender-specific focus groups was to ensure that learners of different genders were able to speak freely. This study, therefore, had twelve (12) focus groups. In school 1, there were 12 female and 10 male learners while in school 2 there were 13 female and 9 male learners. School 3 had 11 female and 5 male learners. School 4 had 12 female and 11 male learners. In school 5, there were 10 female and 5 male learners. Lastly, in school 6, there were 11 female and 10 male learners.

The focus group interviews were open-ended and conducted in an informal, non-directive manner so as to allow conversation to flow as the researcher tried to influence the subject as little as possible. Where the researcher failed to understand a particular point made by a subject, she was able to seek clarity,

and also recorded the interviews on a voice recorder. The focus group interviews allowed the respondents freedom to elaborate on responses in whatever manner they wished.

Markison and Gognalons-Caillard (cited in Kumar, 2005) point out that focus group interviews have advantages and disadvantages and that the researcher should be fully conversant with these before attempting to conduct focus group interviews. The advantages and disadvantages of focus group interviews are discussed below.

4.9.2.2 (a) Advantages of focus group interviews

According to Markison and Gognalons-Caillard (cited in Kumar, 2005), one advantage of a semi-structured or non-directive interview such as the focus group discussion is its flexibility which allows the investigator to grasp more fully the subject's experience than would be possible through the implementation of a more rigid methodological technique. Guba (2001) claims that focus group interviews are very useful in providing immediate feedback from a number of respondents in a short space of time.

Guba (2001) adds that during focus group interviews, participants are stimulated to discuss issues wherein group dynamics can generate new thinking about a topic, which will result in a much more in-depth discussion. Mouton (2010) explains that in focus group interviews, the face-to-face involvement of the researcher can ensure that the discussion is always on track and encourages participants' engagement without one individual dominating the meeting. In this study, the researcher was able to consistently direct the discussion due to the sensitive nature of the topics that were brought up by the learners, specifically the females.

Another advantage of focus group interviews lies in its dynamic nature. According to Denzin and Lincoln (2010), due to the dynamic environment in a focus group discussion, the researcher can modify the topics which are prepared before the session to make the topic more suitable for the purpose. McMillan and Schumacher (2006) point out that a very important advantage of a

focus group interview is that it affords the researcher the capability to utilise non-verbal behaviour as research input. According to McMillan and Schumacher (2006), the expressions, attitudes of individuals, and the intensity of the conversation can be perceived immediately by the researcher, and these can influence the research.

In this study, the researcher made field notes of the non-verbal communication that she picked up from the respondents, and this assisted to nullify some of the findings. For example, in school 1, the researcher observed that the participants avoided eye contact more than in other schools, and this was later explained to the researcher by the teachers that such eye-contact avoidance is as a result of cultural rules whereby youngsters, particularly females, cannot look at an elder in the eye. McMillan and Schumacher (2006) state that focus group interviews provide a benefit with regards to the level of participant involvement in the research. The afore-mentioned researchers qualify the above statement by stating that because every participant is under observation by the researcher, through the voice recording, it is easy to pick up participants' engagement even during non-discussion time.

4.9.2.2 (b) Disadvantages of focus group interviews

Guba (2001) states that compared to individual interviews, focus groups are not as efficient in covering maximum depth on a particular issue. According to Guba (2001), a particular disadvantage of a focus group is the possibility that the members may not express their honest and personal opinions about the topic at hand; they may be hesitant to express their thoughts, especially when their thoughts oppose the views of another participant. According to Babbie (2013), focus groups tend to become influenced by one or two dominant people in the session, thus making the output very biased.

In this study, the researcher made a point of interviewing female learners separately from male learners given the sensitive nature of the discussion, and because she felt that the male learners might dominate the discussions. According to Mouton (2010), the researcher plays an essential role in handling the situation, but if the researcher is not experienced enough, it is very easy for

the whole discussion to be dominated by a few people. In this study, where there were a few dominating characters, the researcher asked them to give a chance to others and also encouraged the quiet ones to participate.

In the previous section, the discussion was on qualitative methods of data gathering; the section below discusses **quantitative methods** of data gathering used in this study, namely, the **questionnaire**.

4.9.3 Quantitative research: questionnaires

The other instrument used for gathering data in this study was a questionnaire. According to Mouton (2010), questionnaires allow researchers to examine many variables such as demographic and life style information, attitudes, motives, and intentions.

Mujis (2004) maintains that questionnaires explain phenomena by collecting numerical data that are analysed using mathematically-based methods, in particular, statistics.

Pointers from a number of researchers below were kept in mind by the researcher during the process of the development of the questionnaire. Questionnaires are typically useful for theory verification, according to Mujis (2004), and in this study questionnaires were used to triangulate data from the focus group interviews and unstructured in-depth interviews. All 119 learners responded to the questionnaires. The questionnaires were administered personally by the researcher during the one hour school break in schools 1, 3, 4 and 6. In schools 2 and 5, learners responded to the questionnaires after school because their break times' duration was 30 minutes, and the researcher felt that this would not be enough time for them to complete the questionnaires.

Ivankova, Creswell and Clark (2011) explain that once a researcher has decided on quantitative questionnaire as a research tool, s/he has to choose between one of the many scales to use. In this study, the researcher chose to use a 5-point Likert scale due to its ability to present multiple responses. During the design of the 5-point Likert-scale type questionnaire, both structured and unstructured (open-ended) questions were used. In this study, the questions in the questionnaire were formulated by the researcher, following Mujis' (2004)

advice that researchers aiming to utilise questionnaires need to write the kinds of questions to be used in their research, themselves, even though they may use a standardized scale such as the Likert scale.

During the process of designing learners' questions for the questionnaire, Travers' (1998) advice was taken into consideration by the researcher. Travers (1998) advises that it is very important that the construction of questions should take into consideration the study's objectives, the size of the sample, and the analysis of data. In addition, Travers (1998) advises that the researcher should weigh very carefully whether structured or unstructured questions should be used in the questionnaire. Unstructured questions allowed the respondents freedom over how they wished to respond; however, in the questionnaire such questions were limited to only 9% of the total questionnaire items since the researcher also held unstructured focus group interviews with the same students. The questions posed to the learners attempted to elicit responses to the following concerns:

- how the learners viewed the teachers' interaction with different genders in the e-learning classroom with reference to curriculum, role assignments, access to both teachers and computers, feedback, and teaching material;
- whether learners perceived the teachers' interaction with the learners as having any impact in their success, particularly the female learners in the e-learning classroom; and
- how the learners perceived their society's attitude towards female learners and technology or any other male-dominated career;
- whether there were any other issues that the learners perceived as responsible for the e-learning skills gap of female learners .

Below is a discussion of advantages and disadvantages of questionnaires:

4.9.3.1 Advantages of questionnaires

The advantages of questionnaires, as summarized by Denscombe (2007), are as follows:

- data from questionnaires lends itself to several forms of statistical interpretations based on the principles of mathematics and probability. Such statistics provide the analysis with a quality of scientific respectability. The analysis appears to be grounded on objective laws rather than on the values of the researcher;
- statistical tests of significance from quantitative data give researchers extra credibility in terms of the interpretations they make and the confidence they have in their findings;
- the analysis of quantitative data provides a concrete foundation for description and analysis. Interpretations and findings are founded on measured quantities rather than impressions, and these are, at least in principle, quantities that can be checked by others for authenticity;
- large volumes of quantitative data can be analysed fairly quickly, provided adequate preparation and planning have happened in advance. Once the procedures are 'up and running', researchers can interrogate their results comparatively quickly; and
- tables and charts provide a succinct and effective way of organising quantitative data and communicating the findings to others. Commonly available computer software supports the design of tables and charts and takes most of the hard labour out of statistical analysis.

4.9.3.2 Disadvantages of questionnaires

Denscombe (2007) provides the following summary of disadvantages of using questionnaires:

- data from questionnaires are only as good as the methods used to collect them, therefore, a good questionnaire gives good data and vice versa;
- large volumes of data can overload the researcher, thus leading to the researcher incorrectly analysing the findings;
- since the researcher is mostly not present when the respondents are responding to the questionnaire, there is no clarity, and the respondents might end up skipping important questions, or providing data that is not useful; and

- since the researcher relies on the participants to respond timeously, the probability of unreturned questionnaires is very high, which is not the case with interviews where the research receives the data immediately.

4.10 Data analysis

According to Fox and Bayat (2007), data analysis refers to making sense of what the researcher has collected so that the gained data leads to the knowledge that the study set out to gain. Below, the discussion begins with the qualitative methods' data analysis which refers to the unstructured in-depth interviews and the focus group interviews administered in the study.

4.10.1 Qualitative data management: interviews

In the qualitative analysis of the study, following collection of data from unstructured in-depth interviews with the teachers and the focus group interviews with the learners, data was transcribed and analysed by the researcher through using a mental model technique. According to Johnson and Johnson (2010), the mental model technique of data analysis refers to involved listening to the interview responses, and then reading the transcripts several times. The researcher also developed a Code Book, as suggested by Mouton (2010), so as to ensure a common understanding of the coding process.

The researcher used a tape recorder in order to record all interviews, and she also had a notebook where she recorded all her observations of the non-verbal communication as per Mouton's (2010) advice. The data from the recording was transferred daily to a computer audio programme in order for the data to be securely kept.

In addition, the researcher used an *Excel* matrix to record all data against the participants so that data does not get mixed up. This was done through the codes that were allocated to each participant. For example, a teacher from the second school that the researcher visited would be coded as 2B; therefore, any other additional data from that teacher would be entered against that code. The data was recorded under themes and subthemes that were developed *a priori* in this study.

4.10.2 Quantitative data management: questionnaires

In the quantitative analysis of this study, the researcher coded the learners from 01 to 0119 and entered these codes into an Excel matrix. This was particularly done for the questionnaire responses in order to ensure a research trail as per Denzin and Lincoln's (2010) advice. The learners indicated their responses in the questionnaire through Multiple Choice Question sheets so that the responses could be captured quickly and accurately using the 5-point Likert scale that gave the respondents a choice of five response options, namely: 1-Strongly Agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree.

4.10.3 Qualitative data analysis: interviews

Qualitative data in this study was analysed and interpreted using Denscombe's (2007) guidelines for analysing data through the five stages below. According to Denscombe (2007), the analysis of research data follows a process that involves five stages. In both the qualitative and quantitative data, the stages advanced by the above author were adhered to and are summarised as:

- **stage 1: data preparation** – in this study, the researcher coded, categorized, and checked the data for correctness;
- **stage 2: initial exploration of the data** – following stage 1, the researcher looked for obvious trends or correlations in the data; the researcher used the Code Book and an excel spreadsheet where the data was entered to undertake this task;
- **stage 3: grouping of the data** – the researcher coded and grouped codes into themes in order to compare themes. The researcher also developed categories of the themes in order for these to assist in the analysis and presentation of data, which is stage 4;
- **stage 4: presentation and display of data** – following the analysis of data, themes were interpreted and written up; qualitative data was written up as a narrative, and quantitative data was written up using pie charts and tables to complement the report; and
- **stage 5: validation of external data** – methodological triangulation was used to validate the data.

4.10.4 Quantitative data analysis: questionnaires

Quantitative data analysis refers to making sense of the numbers to permit meaningful interpretation. In this study, Guba's (2001) guidelines for quantitative data analysis were adhered to. These guidelines involve: organizing the data, checking for completeness and accuracy in the questionnaires, assigning a unique identifier to each questionnaire.

Once all the responses were captured, they were analyzed through SPSS by translating raw data into meaningful information and communicating the research results in the form of simple descriptive statistics and graphical representations such as pie charts and tables as a way of displaying the findings. In all these findings, the researcher was guided in analysing the data by the objectives of the study. According to Bertram (2003), statistical analysis facilitates the reduction of large-scale data into a manageable form so that tests can be conducted and conclusions can be drawn from it.

The questionnaire had 42 questions and was divided into sections in order to elicit responses that will answer the research questions and meet the research objectives. The first part of the questionnaire required the students to fill in their biographical details.

The first theme was the *use of computers for learning*. This looked into issues of access to computers, relationships between learners, and the level of altruism between male learners and female learners in the e-learning classroom.

The second theme centred on the actual *experience and performance of the learners in the e-learning classroom*. This aimed at eliciting reflective thoughts on the part of the learners regarding their performance in the e-learning class. In addition, the researcher wanted the learners to share information on the factors that they feel might have influenced their performance both positively and negatively, and their opinions on points of improvement.

The third theme sought to elicit *gender-based reflections on the learners' experiences regarding roles played by the teacher and their peers that assisted them to gain proficiency in e-learning*. These responses were also anticipated to shed some light on the main research aim which seeks to understand the extent

to which teachers' own gender perceptions influence proficiency within the different genders in their e-learning classroom.

Theme four was on *technology and gender issues*. In this part of the questionnaire, the researcher anticipated responses to give information on the level of influence that the learners' community, home, school, and peers had on e-learning, technology, and technology-based career choices for female learners. In addition, the researcher sought to elicit information regarding the learners' own gender stereotypes with regards to the role of technology in females. All the open ended questions that are contained in the questionnaire were meant to elicit responses that could point the researcher to what the students thought are ideal practices for effective gender-sensitive e-learning. The section below discusses how the researcher ensured quality during the study.

4.11 Research quality

According to Mouton (2010), research output can only be valid if it is acceptable quality. In addition, Guba (2001) adds that in their haste to complete the research some researchers do not apply themselves well to their research, and this compromises the quality of the research. In this research, the researcher read work published and guidelines regarding conducting research in a manner that produces quality results. Mouton (2010) espouses that any good researcher has to always be aware of the **rigour** if the method is **qualitative**, and the **validity and reliability** if the method is **quantitative**, and these are discussed below.

4.11.1 Research quality in qualitative methods: rigour

According to Brink, van der Walt, and van Rensburg (2013), reliability and validity are important in all studies; however, they are often viewed with scepticism in qualitative studies for their lack of rigour. Therefore, the aforementioned researchers assert that methods of establishing validity and reliability in qualitative research are not the same as those adopted in quantitative research. These authors state that rigour in qualitative research refers to

openness, relevance, and epistemological and methodological congruence. Below is the discussion of issues that assure rigour in qualitative methodology.

i) Credibility: According to Polit and Beck (2006), credibility ensures that research findings are in accordance with the reality of participants, that is: how true the findings of a study are within the context in which it was conducted. In this research, steps were taken to improve and evaluate the credibility of the data obtained. This was done through peer review where interpretations of the data were discussed with experts in the field of education, and discussions were done with the research supervisor at University of Fort Hare. Data were reviewed and comments regarding the plausibility of emerging findings were sought.

ii) Dependability: The dependability of qualitative data, according to Morse, (2007) shows the stability of data over time and over conditions. Polit and Beck (2006) argue that dependability determines whether findings would be consistent if the inquiry were to be replicated with the same participants in a similar context. To ensure that all data was dependable, the researcher involved her supervisor who was conversant with qualitative research to confirm whether she was adhering to the correct principles regarding focus group interviews.

iii) Confirmability: According to Polit and Beck (2006), confirmability is maintained if there is objectivity or congruency between two or more independent people's data in relation to accuracy, relevancy or meaning. The researcher digitally-recorded the focus group interviews with the permission of the participants. Data was thereafter transcribed verbatim, analysed and handed to an independent qualified qualitative researcher for a discussion to reach consensus on the identified themes, categories and sub-categories.

iv) Transferability: Babbie (2013) states that transferability refers to the degree to which the results of qualitative research can be generalised or transferred to other contexts or settings. In this study, purposive sampling was used so that participants were suitable and representative of the group under study.

v) Authenticity: Two elements associated with authenticity are soundness and authorship, according to Mouton (2010). While soundness refers to the extent of

detail in a study, it also highlights completeness of a source; the latter not only in terms of confirming authorship but also in providing information relating to authority or expertise of an author. Primary and secondary sources, various internet reputable websites and relevant legislation on e-learning and gender issues were used for the purpose of this study. Besides assessing for authorship and soundness, the researcher applied the criteria of credibility.

In addition, through the use of an audit trail, as advised by Babbie (2013), the researcher can provide readers with essential information to authenticate the findings of the study.

vi) Triangulation: Triangulation is defined by Creswell (2011) as the integration of qualitative and quantitative methods. According to Creswell (2011), triangulation is a powerful technique that facilitates validation of data through cross-verification from more than two sources. In particular, triangulation refers to the application and combination of several research methodologies in the study of the same phenomenon. The researcher utilized the triangulation method in cross-checking the information and supplementing data by use of an alternative method. According to Ramchander (1994), triangulation implies that techniques are used in a parallel sense even though one technique may be more prevalent than the other, such as the qualitative technique in this study. Ramchander (1994) further argues that using triangulation provides overlapping information that makes it possible to check results from more than one viewpoint and categorizes triangulation into four types namely: data triangulation, investigator triangulation, theory, and methodological triangulation (in-between/within methods).

This study used the in-between methodological triangulation because it could be employed in both quantitative (validation) and qualitative (inquiry) studies. According to Mouton (2010), methodological triangulation is a method of grounding the credibility of qualitative and quantitative analyses, and it is the preferred line of inquiry in most research done in the social sciences. This triangulation type assisted the researcher to clarify data that was collected through the questionnaires, focus group discussions, and interviews. The methodological triangulation adopted in this study, therefore, focused on

clarification with regards to finding answers to the research questions which are as follows:

- a) What are the e-learning teachers' gender perceptions?
- b) To what extent do the teachers' own gender perceptions influence the proficiency of female learners in e-learning classes?
- c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

The manner in which quality of data was assured for the quantitative research methods is discussed hereunder.

4.11.2 Research quality in quantitative methods: reliability and validity

Maree and Pietersen (2009) state that *reliability* of an instrument refers to the extent that the instrument yields similar results when administered to different subjects from the same population. According to McMillan (2002), reliability also refers to the degree of error that exists when obtaining a measure of a variable. Therefore, carrying out research using an instrument requires that the instrument used to collect data is reliable and valid. Maree and Pietersen (2009) explain that reliability may be assured by the researcher by using similar instruments at different times or administering the instrument to different subjects of the same population and yet getting similar results.

From the above explanations of reliability, the researcher has learnt that reliability in research involves consistency. Consistency, in this context, means that the instrument used to collect data should produce similar results (findings) when used in similar subjects, even at different times. Types of reliability tests are: test-retest reliability, equivalent form reliability, split-half reliability and internal reliability, as per Babbie (2013) and Maree and Pietersen (2009). Taking cognisance of these types of reliability tests, the questionnaires for this study were administered using the test-retest reliability but only with a limited sample of learners due to the influence of factors such as cost and time.

Mouton (2010) explains that the term *validity* refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under

consideration). De Vos *et al.* (2005) and Maree and Pietersen (2009) propose that an instrument can only be regarded as valid when it measures what it is supposed to measure or does what it is supposed to do. Mouton (2010) and Maree and Pietersen (2009) classify validity as: face validity, content validity, construct validity and criterion-related validity. The manner in which these were used in this study is discussed hereunder:

i) Internal validity: refers to the causal relationships between variables identified and the results of the study so as to provide a linked, logical argument in defence of the conclusions reached at the end of the study. In this study, the main question that explored the teachers' gender perceptions that are likely to affect the female learners' proficiency in e-learning was meant to establish a correlation between the variables: gender perception and e-learning proficiency. In addition, in order for the researcher to be able to relate and clarify the authenticity of the findings, the researcher triangulated the data.

ii) Face validity: refers to the extent to which the instrument is used to collect data and appears to be valid after it has been scrutinised by experts in the field where research is conducted. Comments, assistance and advice from experts are helpful to the researcher to make adjustments on the instrument so that it is valid. In this study, the researcher applied advice regarding methodology from academics, researchers, and peers.

iii) Content validity: refers to the extent to which the instrument used to collect data covers the complete content of the particular construct that is set out to be measured. The researcher presented a draft version of the instrument to experts for comments before it was finalised and used to collect data.

iv) Construct validity: involves determining the degree to which an instrument successfully measures a theoretical construct. In this study, the instrument used to collect data was standardised and the constructs covered by the instrument were measured by different groups of related items.

v) Criterion-related validity: refers to developing a measure usually expected, in theory, to be related to other measures or to predict certain outcomes. Criterion validity of the instrument that is used to collect data is determined by

the correlation between the instrument and criterion. If the correlation is low, it means that the validity of the instrument is low, whereas when the correlation is high, so is the validity of the instrument. In this study, feedback was given to the researcher regarding the suitability of her research instruments by the statistician.

4.12 Ethical considerations

Cooper and Weaver (2007) explain that the word 'ethics' is derived from the Greek word 'ethos', meaning one's character or disposition. It is related to the term 'morality', derived from the Latin term *moralis*, meaning one's manners or character. Cooper and Weaver (2007) further state that ethics is made up of norms and standards of behaviour that guide moral choices about our behaviour and our relationships with others. According to Creswell (2011), research, therefore, follows principles that are of most concern to researchers in social and educational research, and these include the reality that the primary researcher is responsible for the ethical standards to which the study adheres. These are elaborated by Kumar (2005) hereunder:

i) Discontinuance: participants were given assurance that they were free to discontinue their participation at any time without being required to offer an explanation.

ii) Beneficence: according to this principle, it is important that research potentially contributes to the wellbeing of others. Part of the principle of beneficence is the question of competence. De Vos *et al.* (2005) state that people who are professionally trained by accredited and acknowledged institutions are much more likely to be competent at what they do. Thus, the qualifications of researchers are of beneficence and require social and behavioural researchers to conduct research that is effective and significant in promoting the welfare of people. This study was conducted by a researcher who is well-trained in research methods, in thesis writing and in research ethics.

iii) Autonomy: in this study, the principle of autonomy incorporated the freedom of individuals' action and choice to decide whether or not to participate in research. No person was forced, either overtly or covertly, to participate in

research. At the core of the principle of autonomy was the right of participants to participate voluntarily in this research or decline to participate. Participants were given clear and sufficient information on which to base this decision, as per Mouton's (2010) advice.

iv) Seeking consent: Schinke and Gilchrist (1993) write that under standards set by the National Commission for the Protection of Human Subjects, all informed-consent procedures must meet three criteria: participants must be competent to give consent; sufficient information must be provided to allow for a reasoned decision; and consent must be voluntary and un-coerced.

Informed consent was sought and obtained from the participants and the Department of Education to conduct the research in the schools, and the necessary ethical clearance was granted by the University of Fort Hare for the research to be conducted. The informed consent form required that all participants be fully informed of the nature of the research, as well as the risks, benefits, expected outcomes, and alternatives, before they agreed to participate.

Bailey (1982) states that the obvious ethical procedure is to justify, clarify and explain the goals of the study to the respondents. In this study, a covering letter was attached to all questionnaires, and all respondents were required to read the covering letter before completing the questionnaires. The covering letter assured all respondents that participation in the research was voluntary, hence they had the right to withdraw from the study and the right not to answer some questions, as per advice from Babbie (2013). Cohen *et al.* (2011) stress issues such as the ownership of knowledge, privacy and individual rights, and these were explained to all participants as well as being given assurance of their anonymity and ethical protection.

In line with the ethical Illuminations by Merriam (2005) and McMillan and Schumacher (2006), the researcher informed respondents of the purpose of the study, how the results would be used, how participants were selected and who was sponsoring the study. The researcher also explained the benefits of the study and assured all respondents that the results of the study would be available to them on request. Lastly, the letter thanked respondents for participating in the study.

v) Providing incentives: most people do not participate in a study because of incentives, but because they realise the importance of the study. Therefore, giving a small gift after having obtained information, as a token of appreciation, is not unethical. However, according to Cant *et al.* (2008), giving a present before data collection is unethical. In this study, the researcher had to provide lunch for the learners in schools 3 and 5 after the survey data session. This is because the learners had to respond to the questionnaires during break time as the schools were operating on a tight schedule. The alternative would have meant that the learners stay behind after school to fill in the forms, and this would have made them miss their school transport.

vi) Justice: in this study the principle of justice was based on the assumption that all people are equal as per Guba's (2001) assertion. The respondents were, therefore, not discriminated against on the basis of gender, disability status, income level or any other characteristics in research. Where age and gender were included in the biographical information of both the qualitative and quantitative research, it was for statistical reasons only.

vii) Fidelity: De Vos *et al.* (2005) explain the principle of fidelity as faithfulness and keeping promises or agreements, specifically between the researcher and the participant. In this study, there was no engaging in deception or breaching confidentiality as this is an ethical violation that infringes on participants' rights. The researcher guaranteed the confidentiality of data and the privacy of respondents. The researcher also honoured all appointments and respected the schedule agreed upon between her and the school. Although she developed good rapport with the participants, she did not take advantage of this.

viii) Non-maleficence: non-maleficence is to avoid harm to other people and to do what would be against their interests. The moral rules that support non-maleficence are that researchers should not kill, incapacitate, cause distress, pain or suffering. According to De Vos *et al.* (2005), the difference between non-maleficence and beneficence is that the former is concerned with avoiding positive harm while the latter is the demand for positive benefit. These were both adhered to in this study.

ix) Ubuntu morality: this means that the researcher needs to do unto others what they would want done unto them, according to Cant *et al.* (2008), as was done in this study. The researcher treated the participants with kindness and respect and established rapport with them throughout the data collection period. In cases where the participants indicated that they can only participate in the study when removed from the school premises, the researcher respected their wish and met with them at a neutral place.

x) Respect for participants' rights and dignity: as human beings, all participants have legal and human rights. No research project should in any way violate these rights when participants are recruited. In this study informed consent was obtained from all participants. At the beginning of the year, a consent form in both English and IsiXhosa was sent home with each learner for their parents or guardians to sign, and, in addition, each learner was required to sign a learner consent form. The researcher also initiated the interviews and surveys by stating the purpose of the research and reassuring all the participants of their rights in the study, especially their right to withdraw from the study at any moment, as well as the confidential nature of the responses made through the study.

xi) Avoiding bias: bias is a deliberate attempt by a researcher either to hide what they have found in their study, or to highlight something disproportionately to its true existence. It is absolutely unethical to introduce bias into a research activity. In this study, bias was avoided at all costs. The researcher used Mabovula's (2010) strategy of *bracketing*, which entails stopping the research and conducting emotional self-reflection when the researcher sensed that her objectivity was becoming questionable.

xii) Using inappropriate research methodology: a researcher has an obligation to use appropriate methodology, within their knowledge base, in conducting a study. It is unethical to deliberately use a method or procedure that is inappropriate to prove or disprove a theory. The researcher heeded this concern by reading up on and using appropriate methodology. In addition, as mentioned before, the researcher conducted focus discussions in a gender-sensitive manner by separating male learners from female learners.

xiii) Incorrect reporting: Kumar (2005) warns against researchers reporting the findings in a way that changes or slants them to serve their own or someone else's interest as this is unethical. Correct and unbiased reporting of the findings are important characteristics of ethical research practice, as was done by the researcher in this study.

ix) Ethics in analysing and reporting back to participants: Kumar (2005) offers important ethical guidelines for quality research and ethics in analysis and reporting back to research participants, all of which were followed by the researcher. In terms of the qualitative data, the researcher followed guidelines for coding and analysing data. The researcher utilized the services of a qualified statistician for analysing the quantitative data so as not to misrepresent the findings. The researcher also kept in touch with the respondents to keep them abreast of the research development and also to re-clarify some of the issues that came out throughout the analysis of data.

4.13 Chapter reflections

This chapter presents discussion of the methods employed to answer the two research questions of this study mentioned in this chapter. A mixed methods research design was implemented, and this allowed sequential use of qualitative and quantitative methods together with a variety of data collection tools. The QUALI-quant approach, where the qualitative methods were the dominant methods over the quantitative method, was used, as per Mouton (2010). The flexibility of the mixed methods provided the most effective way of gaining holistic awareness into and understanding of the various aspects of the study, specifically for triangulation purposes. In the case of this research, qualitative methods involved the audio taping and transcribing of interview responses, observations of participants' facial expressions during interviews, the writing up of field notes, and interviews with teachers, the district official, and learners.

The quantitative method relied on questionnaires administered to all the learners who participated in this study. The choice of the participating schools and all participants was purposive because they had participated in the Walter Sisulu University computer skills project in 2011, whereby an e-learning proficiency gap was noted between female and male learners. Particular care was taken with

the aspect of ethics in research, and the necessary approval from the Department of Education, University of Fort Hare, the schools, parents, and learners at the school was obtained.

The next chapter, Chapter 5, discusses the data presentations and analysis based on the themes that form the basis of this research.

CHAPTER 5: DATA PRESENTATION AND ANALYSIS

5.1 Introduction

In this chapter, teachers' gender perspectives that could affect female learners' proficiency in e-learning are discussed. In addition, learners' perspectives regarding factors that affect their performance in e-learning are also discussed.

5.2 Unstructured in-depth interviews

One-on-one interviews were used to elicit responses from six teachers and a District official. In addition, focus group interviews were conducted for all the one hundred and nineteen (119) participating students. For the sake of logical presentation of data, this chapter presents findings from the one-on-one interviews and then follows these up with data from the focus group interviews as a measure of triangulation. Findings from the questionnaires are presented in the latter section of this chapter.

5.2.1 Demographic characteristics of the participants

As mentioned in Chapter 4, six (6) teachers, four (4) female and two (2) male were interviewed. The spread of gender allowed the researcher a good mix of perspectives from both male and female teachers (see table 4.2). This gender mix was especially important since this study was on gender issues in education and technology. Table 4.2 also showed that the teachers' ages range from 26 to 46 years. This is another important factor that the researcher found useful in the data analysis chapter since she linked the ages of the teachers to their responses in an attempt to interpret and understand their experiences. These teachers each have a minimum of four years' teaching experience, and all of them are of Xhosa origin.

Since these participants are all e-learning (English subject) teachers, they have daily contact with the students who participated in this study, and both the teachers and the learners were involved in the 2011 Walter Sisulu University e-learning project mentioned in Chapter 1 as motivation for conducting this study. The schools that were selected presented a spread of research site contexts.

Two (2) schools are located in informal settlements (otherwise known as squatter camps), three (3) are in rural areas, and one (1) in a township. Rural areas, informal settlements, and townships are mostly inhabited by people from low or no income brackets according to the Eastern Cape Office of the Premier report (2011). This study is set against a background of learners and teachers from the afore-mentioned economic backgrounds.

In addition, the researcher sourced data that added more of the teachers' background details to the biographical data that is presented in table 4.2. Below is a brief discussion highlighting the teachers' backgrounds so as to place in context the gender perceptions of the teachers.

Teacher A: She is a female teacher who teaches in a school that is in a rural setting. She also grew up in a rural setting and proudly embraces village life, its practices, its culture and being a submissive Xhosa woman. Teacher A and her sister were not allowed to go to school by the father until much later in life because they had to look after the family's livestock since there was no boy in the family. Her sister eventually went through forced marriage. Teacher A has three daughters, and she is resigned to the fact that they too might go through forced marriage since her husband believes in this practice.

Teacher B: Teacher B grew up in a village, but her family relocated to a township in her teens. She teaches in a school located in a rural area. This teacher relates a sense of nostalgia for life in the village which to her was very strict and structured, based on culture and gender roles. She later became a truck driver and worked in rough terrain with males who expected sexual favours from her. When she refused, she became a victim of a hijack incident and resigned from that job to be a teacher.

Teacher C: He is a male teacher who teaches in a township school. He grew up in a township and was raised as the only boy among many female siblings. This teacher claims that his mother and father ensured that his sisters treated him in a manner that made him seem superior.

Teacher D: He is a male teacher who teaches in an informal settlement school. This teacher used to live out of the country as a freedom fighter; he came back

and was given a hero's welcome by the community. Following that, he became a teacher but also formed his own church whose membership is predominantly female.

Teacher E: She is a female teacher who grew up in a rural setting and also teaches in a rural school. She fully embraces life in the rural village where her school is situated. This teacher firmly believes in structured role differentiation and feels that this is a good way of preserving the Xhosa culture.

Teacher F: This teacher grew up in a township and later in an informal settlement. She teaches in a school that is in an informal settlement. She comes from a family of six "choice assorted" kids (as she puts it). This means that each child has his or her own father.

5.2.2 Coding distribution of participants

For ease of data collection and purposes of anonymity, given the sensitive nature of the responses from the participants, the teachers are presented under pseudonyms: teacher A, B, C, D, E, F in the order that they were interviewed. In addition, the schools where the researcher conducted the study are also coded in the order of the visits made as school 1, 2, 3, 4, 5, 6. These codes were presented in a coding spreadsheet, and the response categories of the teachers were entered against the corresponding code. For example, responses of the teacher from school 3 were entered in a column corresponding with 3C.

Since the study is QUALI-quantitative (Creswell, 2011), as explained in the methodology chapter, the bulk of the discussions in this chapter lie in the qualitative data responses which are mainly the teachers' responses, the District official's responses, and the focus group interview responses. The quantitative data responses are discussed in the last part of this chapter for triangulation purposes. The section below sets the scene by explaining how the interviews were conducted before delving into the actual discussion of the responses.

5.2.3 Interview guiding schedule

The researcher conducted an unstructured interview as mentioned in Chapter 4, and this meant that the opening question was the same for all teachers. The

questions that followed were guided by the responses of the teachers and the themes established by the researcher from the two research questions *a priori*. *A priori*, according to Denscombe (2007), relates to reasoning or knowledge which proceeds from theoretical deduction rather than from observation or experience. In this study, Denscombe's (2007) caution that such a guide should be used minimally to avoid deviating from the open nature of the unstructured in-depth interview was heeded.

At the beginning of the interviews, the researcher presented each participant with the initial common question that guided the interview: **“Tell me a little about your background as a Xhosa woman/man, your childhood and your career”**. This initial question was an open-ended question that aimed at eliciting information regarding the teachers' internalized gender socialization and development based on their backgrounds. The questions that followed were guided by the teachers' responses and were aimed at determining the extent to which the teachers' background and present communities (including those of the school) could influence the teachers' individual gender perspectives.

The questions that followed the initial question were also constructed to find out about the teacher's own gender biases (and beliefs) and how s/he applies these in everyday interaction with female learners and male learners in the school and the e-learning classroom. The intention of the researcher was to determine if there was a link between these biases and female learners' performance in the e-learning classroom.

Additional questions were then aimed at eliciting information regarding the support and professional development that the teachers received from the Department of Education (DoE) in order to be able to apply gender-sensitive e-learning in their classes.

Questions were asked from all participants, and follow-up, clarification questions were also used when an unclear response emerged from the respondent. The section below presents data from the interviews as mentioned before in this chapter. The data presents a selection of responses from the participants under each set of themes and subthemes that emerged from the study, and then the researchers' inferences from the responses are discussed.

5.3 Responses from the teachers

The discussion in this section presents findings from unstructured in-depth (narrative) interviews with the six (6) teachers. The afore-mentioned presentation of findings is guided by the themes and sub-themes adopted *a priori* from the literature study undertaken by the researcher (see *sections 2.4 and 2.5*). *A priori*, according to Denscombe (2007), relates to reasoning or knowledge which proceeds from theoretical deduction rather than from observation or experience.

Chapters 2 and 3 presented research conducted on various gender factors that affect societies, schools and the performance of female learners in schools, especially within the context of technology. The afore-mentioned factors were viewed through the lens of the theoretical frameworks: critical pedagogy, constructivism and educational feminism, and these guided the *a priori* establishment of this research's themes. To explain this further, critical pedagogy (Ralphe, 2011) claims that there is unequal social stratification in societies based on race, gender and class in schools. Inequalities that were shown by literature reviewed in this study were predominantly on gender in societies and within schools, and education feminist arguments problematized to patriarchy, which predominantly appeared to be an overarching base of the gender inequality that occurs in societies and within schools.

In addition, literature reviewed on socialization (Dlodlo, 2010) reveals that gender is a socially constructed phenomenon and explored various ways in which such gender constructions play a role in gender inequalities that are challenged by critical pedagogy; these were linked to socio-constructivism in Chapter 3. It is, therefore, based on these theoretical underpinnings that the researcher framed the study's sub-themes and themes *a priori*.

5.4 Patriarchy

Patriarchy, according to Lope (2000), is a social and ideological paradigm which views males (who are the patriarchs) as superior to females. Chacko (2003) adds that in African communities, such as the ones in which this study is conducted, patriarchy plays a major role in influencing people's gender

perceptions and how these are acted out in communities. In order to indicate how the role of patriarchy influences gender perceptions and is expressed in society, patriarchy is discussed under the following sub-headings, namely: Patriarchy's influence on gender, Exploitation, Discreditation and lack of support, Oppression, Gender discrimination, Subordination, Sexism and sexist behaviour, Contamination, Female disrespect, Gender-based violence, Not taken seriously, Misogyny, Biological determinism, Public and Private Realms and Gender-role stereotyping.

5.4.1 Influence on gender

A lot of gender perceptions are influenced by the patriarchal nature of the environment where the participants grew up (Lope, 2000). Regarding the issue of patriarchy's influence on gender and gender perceptions, the teachers related as follows:

2B (female): It was a typical Xhosa village upbringing where the father and brothers and uncles were the heads in the village, where females showed respect to them by following culture.

3C (male): It [gender separation] is convenient if used within Xhosa culture. Everyone knows what is expected of them and their roles.

5E (female): Life in the villages was very strict and structured, based on culture and gender roles.

Within this view of patriarchy, female respondents' responses point to how they have accepted this gender differentiation:

1A (female): I proudly embrace village life, its practices, its culture and being a submissive Xhosa woman.

5E (female): ...even in my house, girls hang their underwear on a separate fence from the male learners.

2B (female): She knows her place as a Xhosa woman and does not bother challenging the status quo.

1A (female): ...females should learn and not try to cross gender barriers in rural societies.

2B (female): For example, we accept that in Xhosa culture, a man walks in the front, and a woman walks behind. This is because the man carries a stick and will protect the woman from anything that can attack her.

3C (male): Ask any one of these learners, and they will tell you that their parents sleep in separate beds because that is how the traditional culture does things.

3C (male): I find that I do tend to think most females are inferior to men because of the way I was brought up.

2B (female): I was a woman; all I knew was to clean, cook, look after kids.

4D (male): The father and the uncle and the brother and the mother who supports the fact that a girl should be like this and a boy should be like this.

5E (female): For example, girls sit on the one side of the room while boys sit on the other side whether it was school, church and so on.

Responses of some teachers show that gender perceptions are manifested in the schools with respect to female learners' and male learners' behaviour.

2B (female): In the school, when I ask the learners to walk to the computer lab, the male learners line up first because they say that men always lead the way.

6F (female): She does not support female learners venturing to any male dominated subjects and vocation and therefore does not support e-learning and technology career choices for female learners.

4D (male): Male learners in the school are expected to show boldness and are not allowed to show softness.

1A (female): [in the e-learning classroom] The male learners are also very forward and ask questions every time they need help. Female learners are shy and hardly ever ask for help.

The allocation of chores in the schools also shows evidence of gender differentiation encompassed in patriarchal societies.

2B (female): This is why I always insist that the female learners sweep the computer lab after school every day, and the female learners that don't, get punished.

1A (female): Sometimes, heavy chores such as fetching water for the classes in schools and looking for firewood are still done by female learners because culturally, this is how it is.

1A (female): This [chore allocation at the school] is guided by the society's chores given to male learners and female learners.

5E (female): Chores that need physical energy are given to male learners while the light ones are given to female learners.

Participants also reported that males are given leadership powers in patriarchal societies, and this is attributed to culture and legal fraternity.

4D (male): According to our Xhosa culture, many customs allow men more decision-making powers.

1A (female): They [men] are given positions as heads of households where there is no father-figure.

3C (male): This is because as the only son, I was taught to lead at an early age, and that is how it has always been in our culture.

2B (female): Generally, men have much more power and freedom to be leaders than women; this is how it is done even in the tribal courts.

6F (female): This is a man's world, and it does not matter who says what.

5E (female): All the parliament people can change this law and that law, but as long as there are not any people to monitor the situation we

females are finished because it is the men that come up with these laws anyway.

Some responses show that traditional beliefs are responsible for gender perceptions in the schools.

2B (female): Female learners who are exposed to dust from someone else's sweeping might never get married, and we know how shameful it is for female learners not to be married in our society.

2B (female): This is because there is a belief that the dust that comes as a result of sweeping is very bad luck for male learners especially.

1A (female): It [dust from sweeping the classroom] presents a threat to their [the male learners'] manhood.

1A (female): it is in the nature of females to please men. In the village, females weave baskets and make beads just to decorate the men's horses to show their love.

From the above discussion, the above sentiments regarding the influence of patriarchy on gender perceptions emerged indicating that females are perceived as inferior to males, kept in subservient positions through cultural indoctrination, and exposed to gender stereotypes. Moreover, female capabilities are limited through exploitation of their skills such as nurturing families and roles such as cleaning and mothering.

5.4.2 Exploitation and manipulation

In patriarchal societies, according to Wainana (2008), females are exploited through several means where culture is used to 'brainwash' them into believing that male domination is a given. In such cases, Wainana (2008) continues, various rituals that may be considered abusive to females are acknowledged as a norm and never interrogated by such patriarchal societies because they are predominantly for the benefit of males.

The responses below from female respondents show that they have experienced and accepted the exploitative status quo:

2B (female): Us girls were gathered by the elderly females and went through vaginal inspection.

1A (female): ... and we were taught how to be proud Xhosa females in preserving our purity for our future husbands.

2B (female): [in the female initiation schools], female initiates are also taught how to please a man sexually.

5E (female): They [men] contribute ubudoda (manhood) and isidima (dignity) of the home. Have you ever seen how undignified a house without a man is? As long as there is a man in the home there is dignity.

1A (female): Girls are not to eat certain foods like eggs because they would be fertile and get pregnant [before marriage].

2B (female): Females were not allowed to get these documents [identity documents] because they had to be signed either by their husbands or their parents if they were unmarried.

1A (female): I firmly believe in structured role differentiation and feel that this is a good way of preserving the Xhosa culture.

From the above discussion on exploitation and manipulation, the following issues on gender perceptions emerged: female exploitation in patriarchal societies is justified through cultural practices, it plays a part in the indoctrination of females, and is accepted as the norm by females.

5.4.3 Discreditation and lack of support

According to Mabovula (2010), in most patriarchal societies, females' capabilities are underestimated, and females are discredited and only acknowledged for their nurturing activities. In addition, Manning (2010) points out that most tasks fall on the shoulders of the female in patriarchal societies, and this lack of support from the males is mostly explained through gender role differentiation.

All female participants reported experiences of discreditation and lack of support. Some lack of support cited was in the form of unfair gender role expectations.

2B (female): Now the females on the other hand know that if they do not bring food home, it will be mama this and mama that, and mama I'm hungry, whereas the father is busy drinking in the shebeen (pub).

1A (female): For example, female learners have to really go far to fetch water.

Both male teachers reported how they perceive females as useless and inferior, thus discrediting their intelligence.

3C (male): Nowadays, I have come across many intelligent and achieving females, but find it hard to look at them as anything other than just females.

4D (male): ...females cannot ever be more intelligent than males.

3C (male): ...my sisters still consult me for any major decisions, especially those not married. My mother funny enough is the one who trained my sisters to respect me so much, spoil me and call me Bhuti although I was much younger than them.

3C (male): I was put in charge of the house and the money was kept by me.

Some teachers discredit the female learners through their perceptions of abilities of females.

4D (male): I think this thing of trying to promote computers for female learners is a wasted project.

3C (male): computers are meant for males, just like Maths and Science.

From the above findings on female discreditation and lack of support, it emerged that females are discredited through being viewed as people of limited intelligence and viewed as not fit for challenging careers and subjects.

Furthermore, females lack support through having to do physically challenging tasks and expectations by society to be docile and not engage in developmental activities.

5.4.4 Oppression

Walby (1990) explains that in the case of female oppression in patriarchal societies there is a system of oppressive supremacy associations which are hierarchical and unequal where males dominate through control of females' production, reproduction and sexuality. Gobodo-Madikizela (2009) adds that patriarchy enforces masculinity and femininity character stereotypes in societies, and this strengthens the afore-mentioned oppression of females by males.

Female participants responded that the oppression from society as a whole limits their sense of expression:

2B (female): Because of this [being female], we have no real voice over what happens.

Participants also responded on how oppressive behaviour manifests itself through indoctrination and violent behaviour directed at females by males.

1A (female): In this village, there are still a lot of forced marriages that happen.

1A (female): This was a matter of pride for us because we were praised for keeping ourselves pure for our future husbands.

Responses from some participants show that there is perception of female oppression and dominance as the right of males because of being encouraged by the patriarchal society and families.

4D (male): As men, we are taught that it's our right [to dominate females].

3C (male): I'll tell you something suster (sister), females don't mind spoiling us men.

6F (female): A guy can make the whole township pregnant and he would be casually called ulewu (player).

2B (female): The female siblings therefore end up accepting the domination of the brother.

5E (female): This [male superiority] happens in church, in the staffroom, in supermarkets, it's all part of my life and it's no use fighting it.

Responses also show that male dominance and oppression affects female learners in the e-learning classroom negatively.

5E (female): They [female learners] seldom even come to the computer lab because I guess they are just tired of the whole thing of fighting over computers with male learners.

4D (male): In the e-learning class, female learners are expected to be ladies, and male learners are allowed to speak out more often because they are naturally hyper.

2B (female): the male learners grab the best computers for themselves and have no understanding of equality and sharing with females.

1A (female): She and her sister were not allowed to go to school by the father until much later in life because they had to look after the family's livestock.

From the above discussion, it emerged that female oppression endorses female domination and reinforces masculinity and femininity personality stereotypes through oppression of females by males.

Moreover, in patriarchal societies culture is used to justify female oppression and restricts the educational endeavours of females;

5.4.5 Gender Discrimination

Ray (2011) explains discrimination against females as: unequal treatment in terms of basic rights to food, health care, education, employment, control over productive resources, decision-making and livelihood not because of their biological differences or sex, which is natural, but because of their gender differences, which is a social construct.

Some participants show that they experience discrimination as females, and report such discriminative practices thus:

1A (female): We have no voice as females in the village.

5E (female): A woman whose husband has died has to wear black or navy or any not so bright colour for six to twelve months. A man only wears iqhosha (a button covered in black material) if he feels like. It's not such a bad thing to show respect to your deceased husband.

1A (female): We were told that we must continue fetching water from that far place and our idea was not accepted.

1A (female): By the time they [our grievances as females] reach the Chief, it's a different way than how you said it and it's dismissed.

Some responses show that discrimination is acted out in schools and affects female learners in the e-learning classroom. Such discrimination against female learners surprisingly emanates from both male and female teachers.

3C (male): I told you that female learners are not allowed to my office to ask questions about the computer class and I said to you it's for their protection since there is all this thing about violence.

3C (male): I said it would be best if the female students never went to my office because it would be easy for them to say I raped them especially with my record.

6F (female): In my e-learning class I am more comfortable with interacting with male learners [in my e-learning classroom].

5E (female): Female learners often annoy me by being very chit chatty, not having any direction or goal and just being too slow to understand technology.

4D (male): I shout at them [female learners] more than I shout at male learners [in the e-learning class]. They are very lazy and passive!

2B (female): Next year I will propose that the female learners do something else in the place of e-learning classes because they are not coping.

From the above discussion, the following issues on discrimination come to the fore that females are unequally treated in terms of their basic rights and are limited with regards to chances of education through discriminatory practices.

Moreover, in patriarchal societies, females are rendered voiceless through discrimination, humiliation, exploitation, oppression, control and violence.

5.4.6 Subordination

According to Ray (2011), female domination/subordination is patriarchal in nature and is entrenched and legalized by numerous ideologies, societal practices, and establishments such as family, religion, education, media, law, state and society.

Some female respondents' experiences of subordination are linked to culture. They responded thus:

4D (male): Yes, because of our customs like ukoluka (male circumcision ceremony) and others, we have a history of men as leaders. We can't do anything about this.

3C (male): Females have come to accept it [dominance] as the main thing about ubudoda (manhood).

5E (female): Our African or Xhosa culture says we should be respectable and respectful as females.

A1 (female): The female learners simply follow [the kidnappers during the process of forced marriage] because they are not interested in fighting.

6F (female): We can never compete with men because they have their freedom that started at the time of our grandfathers and there is nothing we can do about this.

2B (female): This was a matter of pride for us because we were praised for keeping ourselves pure for our future husbands.

Responses from both male and female respondents show that male dominance manifests itself in the school through comments such as:

4D (male): These female learners come to school in grade R already knowing their place in this world.

2B (female): Female learners should look up to the brothers for protection and guidance at school as taught by their parents at home.

1A: I understand why the female learners are so passive at school.

From the responses above, female subordination issues that emerged are that females are encouraged through their families to accept male siblings' domination and are dominated through the use of violence such as forced marriages.

5.4.7 Sexism and sexist behaviour

Sexism is defined by Papallia (2003) as attitudes or behaviour based on traditional stereotypes of sexual roles. Female respondents reported being exposed to sexism and sexist behaviour. These responses below also seemed to reflect the female teachers' acceptance of sexism as influential in how they perceive gender:

5E (female): ...men here do not like "damaged goods".

1A (female): ...she thinks there should be equality. I don't think this is realistic in our societies.

4D (male): Men always view females as not clever, and that's a fact.

6F (female): Males see a huge gap and take it to abuse us, but we can't blame them completely.

6F (female): ...female learners' appearance in the school attracts disrespect from male learners.

Some participants' responses show that they perceive sexism as justifiable.

4D (male): Female learners specifically like those types [rude] of male learners.

3C (male): If you came and told me that you have caught a certain boy touching a girl's breast, the girl would deny that, just to show that they want to be desired because that gives them a boost.

3C (male): A girl might get into the office with a short uniform and suggestive smile and us being weak, I sleep with her and then ...

6F (female): I think females just cause men to treat them like this [rudely].

4D (male): So you know that thing uba (if) female learners do not like a guy that didn't beat them up.

4D (male): They [females] are responsible for the ill-treatment that they receive from males.

3C (male): You [females] also put us under pressure to act like men.

3C (male): It's all very confusing because females also play these games so you never know what's what until it's too late.

Some responses show that males view the anatomical characteristics of females as a determinant of their sexist perceptions towards females.

4D: Females are created "soft" and they should not attempt getting out of that mode.

4D: Softness allows females to be Sunday school teachers in church or do counselling in schools.

From the above, the following tendencies regarding sexism and sexist behaviour emerged: sexist remarks are common among male teachers and sexism occurs in the society and diffuses to the schools.

Moreover, females are expected to only carry out 'soft' tasks by males and are blamed for all the sexist behaviour that is directed towards them by males

5.4.8 Contamination

Female participants reported certain gender perceptions with regard to their experiences on the issue of contamination as most of these experiences are fuelled by cultural beliefs.

2B (female): In my house, females hang their underwear far from male's underwear.

4D (male): You can ask these learners, they will tell you that their parents sleep in separate beds.

Some of the participants shared how such contamination issues become transposed into the schools and affects how female learners relate to males in schools.

2B (female): Whenever they (male learners in the e-learning class) suspect a girl of being in periods, they sit as far away from that girl as possible.

1A (female): It is believed that a girl that is on periods stays apart from male learners because she will make them "weak".

5E (female): In the staff meeting one day, one of my male colleagues even suggested that the school must pass a rule that female learners that are on periods must stay away from school. The only reason this was not passed was that one female teacher suggested that they would have to apply this rule to teachers as well. They saw that this would mean that the school would be understaffed on a daily basis, and the female teachers would use this as an excuse not to come to work, so they dropped the idea.

1A (female): Male learners cannot share chairs in the computer lab with female learners.

2B (female): Sunbathing is a thing for female learners ... so the male learners refuse to use the computers that are close to the windows.

3C (male): Male learners grab the faster computers because they say slowness is a woman's thing.

4D (male): Female learners are so cheeky, and worse when it's that time of the month.

5E (female): In our culture, the men always lead the way, that's why the male learners always are in front of the queue to go into the lab.

From the discussion above, the following gender perceptions regarding contamination emerged, namely females are treated like they do not belong to traditionally male dominated spaces and are viewed as infected and infectious to males.

5.4.9 Female disrespect

Crawford (2014) describes disrespect for females by males as lack of respect directed at females by males. Robinson (2012) insists that patriarchal societies have raised males to be disrespectful towards females.

Female participants related experiences of disrespect shown towards females by males as:

5E (female): The male teachers would tell her that her ideas are clearly coming from a female perspective.

1A (female): We were told that we are just being lazy and finding any excuse not to go fetch water for our households.

2B (female): Men deal with life challenges by going to drink the little money that the family has.

Some responses relate how males disrespect females by treating them as sexual objects.

D4 (male): As a guy, you'd have about 5 girlfriends. They all know about each other but they don't mind.

2B (female): My truck colleagues expected me to sleep with them just like how the other females do.

4D (male): Others [girlfriends] will even bribe your sisters to tell them what the other girlfriends were wearing when they came to visit so that they can better that uyacava (you know).

3C (male): A girl might get into the office with a short uniform and suggestive smile and us being weak, I sleep with her and then ...

Disrespect towards females is manifested in the schools through negative comments and behaviour from males.

4D (male): They [female learners] are there [in the computer class] as a waiting station to get a guy that's going to marry them.

Some female teachers report preferential treatment given to male colleagues and male learners.

5E (female): The male learners from circumcision school can only be punished by a male teacher.

A1 (female): Male learners from initiation schools come back with a superior attitude and are more respectful to my male colleagues than female teachers.

Disrespect due to possible patriarchal ideologies spill over from societies into work situation, and some female teachers are subjected to ill-treatment by male colleagues

5E (female): Sometimes even if I [female teacher] go to look for the male teachers [to punish a newly circumcised boy], one will say "try so and so, I'm busy", then the other one sends you to another one until you give up.

From the above findings on disrespect targeted at females, the following gender perceptions were found: males carry out their disrespect of females from societies to the work situation and male learners disrespect female teachers and do not acknowledge their authority.

5.4.10 Gender-based violence

According to the South African Police Service (2012), gender-based violence is any form of violent behaviour that is targeted at the opposite sex. All female participants reported being exposed to gender-based violence which was either domestic or social, directly and indirectly.

1A (female): *My mother often got beaten because of not giving him indlalifa (heir).*

2B (female): *She was beaten so badly she was in bed for two days.*

5E (female): *They [males] made them [abducted female learners] pregnant through forced marriages to ensure that their young wives will not run away.*

2B (female): *Her [the teacher] sister eventually went through forced marriage.*

1A (female): *She [the teacher] is resigned to the fact that they [her daughters] too might go through forced marriage since her husband believes in this practice.*

1A (female): *The beatings even contributed to my mother not being able to give birth at all after my sister and me.*

Some respondents experienced gender-based violence socially.

6F (female): *society is responsible for the violent males we have in homes, churches, schools and malls.*

2B (female): *I couldn't believe when I was new in... township [*township's identity withheld] how people watched a knife fight and laughed like there's not going to be a dead body coming out of this fight. Mothers, fathers, uncles would later comment about the good technique so and so's son had in a knife fight. The men in the township earn respect through such fights.*

Some respondents reported witnessing violence in the schools.

6F (female): *Female learners also use knives, campus sets, and bricks to fight one another over some school boy.*

1A (female): *I hear the male learners swearing at them [the female learners].*

2B (female): ...but what can I do as a female teacher who is not allowed to punish these male learners?

From the above discussion, the following perceptions on gender-based violence come to the fore, namely that gender-based violence, whether domestic or social, is more prevalent towards females than males in patriarchal societies and is acted out by males through swearing and physical violence towards females.

Moreover, in patriarchal societies male learners learn to be violent and to harass female learners in their homes and communities including use of violence and harassment in schools to exert their domination over female learners.

5.4.11 Not taken seriously

According to Palm-Forster (2000), in patriarchal societies females are not taken seriously. Such conduct, as per Manning (2010), shows lack of respect that is common in such societies.

Respondents shared experiences whereby females were not taken seriously as:

5E (female): The male teachers would tell her that her ideas are clearly coming from a female perspective.

5E (female): ...and that she [the female principal] must consult them [the male teachers] every time she has an idea so that they can tell her if it will work or not.

1A (female): As much as I have dreams for my female learners, these are for humble careers like social work and teaching.

2B (female): Females had to fetch wood and water from far and cook for the family.

3C (male): ... they [female learners] should concentrate on subjects that will not break their pretty heads.

Some responses reflected that even females do not take fellow females seriously.

1A (female): *I also do this as a parent because female learners are wasteful with money.*

5E (female): *I can tell you that I also fall into that category of females that accept men as superior.*

2B (female): *I was brought up in a typical Xhosa village upbringing where the father and brothers and uncles were the Heads in the village, where females showed respect to them by following culture.*

1A (female): *We can never compete with men in traditional societies because they have their freedom that started at the time of our grandfathers and there is nothing we can do about this.*

6F (female): *This is a man's world, and it does not matter who says what. All the parliament people can change this law and that law, but as long as there are not any people to monitor the situation we females are finished.*

In some cases, responses showed sexist comments reflective of not taking females seriously.

D4 (male): *I think they should concentrate on subjects that will not break their pretty heads...and leave science and technology to the male learners.*

2B (female): *...she just was a representation of females being weak.*

6F (female): *They [female learners] deliberately sleep with male learners so as to get imali yegrant (SASSA child grant) for having a child.*

6F (female): *This [the SASSA child grant] gives her[girl] financial freedom to start buying things that she wants and the father of the child also expects a few coins from this money for skyf (cigarettes)..*

6F (female): *These kids [of the female learner who gets pregnant] are potty trained quite early to save on the nappies anyway. In this way, everyone is happy. The boy gets new respect from friends as a father,*

and this puts pressure on the others to impregnate female learners. The girl gets grant money and that's it.

Females were also perceived as unfit for certain vocational choices that were traditionally set aside for males.

4D (male): He does not see the role of technology in female learners and feels that a gender-inclusive education has no place in South Africa.

5E (female): ...But if you look at our records, you will find that not a lot of them [female learners] go to varsity.

Female learners, as a result of not being taken seriously, reported being often bullied at the e-learning class by male learners.

1A (female): Sometimes the male learners expect the female learners to give up their chairs just because the boy's chair is too close to the sunlight from the window because ukugcakamel' ilanga yinto yabafazi (only females care to sunbathe).

2B (female): Sometimes it is because they want the faster-loading computer because they do not want a slow one since slowness is associated with females.

From the above, the following perceptions regarding the issue of females not being taken seriously came forth, and these are that in schools, female learners are not taken seriously by both male learners and their teachers. The SASSA Child support grant is abused as an option to drop out of school by the female learners and female learners are exploited by their boyfriends through the SASSA Child support grant.

5.4.12 Misogyny

According to sociologists Johnson and Johnson (2010), misogyny is a cultural attitude of hatred for females because they are female. All the participants reported their experiences of violent incidences of misogyny thus:

1A (female): My father arranged for her to be married to "a man twice his age".

2B (female): In this village, there are still a lot of forced marriages that happen.

3C (male): He shared information about a rape incident he took part in.

3C (male): I really did not like beating up females, but I had to do it so that I can be considered a man.

3C (male): One way to prove manhood was rape, if it was gang rape, it was called Streamlining.

2B (female): Since I refused to sleep with them, one of them [male truck drivers] organized a hijack of the truck I was driving.

Some responses show that the learners' education is affected negatively by misogynous actions.

5E (female): One [girl] dropped out of school through pregnancy, and the other two [female learners] through forced marriages to guys that work in coal mines.

2B (female): The female learners are mostly affected by the bad behaviour [of male learners in the e-learning classroom].

1A (female): I am praying every day that it [forced marriage] doesn't happen. It will mean the end to my two daughters' schooling.

2B (female): They [male learners from the initiation school] are also very rude to the female learners, calling them izigqwathe (snot).

Some respondents believe that females deserve the misogynous treatment that they receive from males.

6F (female): Female learners in my school are more sluttish.... They wear gray pants so they deliberately don't put belts so that they can show their g-strings.

5E (female): Sometimes I think no wonder male learners shout at them [female learners] and do not respect them in the e-learning class!

4D (male): Believe you me, these female learners fight to be number one to sleep with this guy even if they know about this theory. To them it's an indication that they are the best girlfriend, but to the guy, they are the least favourite.

6F (female): There is a lot of give and take [between male and female learners] that some people might interpret as abuse.

Some responses from males were that violent misogyny that happens to females can be excused and corrected through cultural rites.

3C (male): The boy's [rapist] family pays a goat to the girl's [raped] family and a bottle of brandy to apologize and the girl's family does the ceremony and cleanses the girl for prevention of further bad luck.

3C (male): The family members [of a girl who has been raped] slaughter a goat and call on the ancestors to forgive you [the rapist] so that you can move on without any bad luck.

From the above discussion on misogyny, the following tendencies emerged, namely, that females are sometimes targeted for violent behaviour such as rape and then blamed for the violence that they experience from males.

Furthermore, families are sometimes the main perpetrators of misogyny and forced marriages put an end to female learners' schooling.

5.4.13 Biological determinism

Papallia (2003) explains biological determinism as the mutual understanding that almost all human characteristics and mannerisms are inborn and cannot be changed. Another dimension of biological determinism is from Berry (2010) who maintains that biological determinism is a hierarchical social classification assigned to females based on the perception of female genitalia through discriminatory practices where females are prohibited from doing certain jobs. Regarding biological determination, the participants shared their experiences as:

6F (female): These men [the ones the female learners are forced to marry] are way older than these female learners and only see them in

December [since they mostly work in the mines] to make them pregnant so that when they leave, they are assured that their young wives will not run away... unlike in the urban areas, men here do not like “damaged goods”, and a girl who has run away from marriage is seen as that.

5E (female): In the staff meeting one day, one of my male colleagues even suggested that the school must pass a rule that female learners that are on periods must stay away from school. The only reason this was not passed was that one female teacher suggested that they would have to apply this rule to teachers as well. They saw that this would mean that the school would be understaffed on a daily basis, and the female teachers would use this as an excuse not to come to work, so they dropped the idea.

3C (male): Also a girl that is on periods stays apart from male learners because she will make them “weak”.

1A (female)...even in my house, girls hang their underwear on a separate fence from the boys’ underwear. This is how I have been brought up.

2B (female): I don’t think this [equality] is realistic in our societies. Also, the physical makeup of females is different. I am happy to go and fetch water from the river with my daughters because this is what we can do best. The men are physically made to build the houses we live in, so I am happy to let them do that. ..

3C (male): You [female learners] must not be seen as cleverer than male learners, especially with regards to things that are known as male learners’ stuff. This may put male learners off and risk the girl losing future marriage prospects and having babies.

The following beliefs regarding biological differences can be detected from the above responses, namely, that through biological determinism, females are made to feel unclean.

Moreover, in patriarchal societies, biological determinism imposes physical masculinity and femininity character stereotypes and strengthens the unequal power relations between males and females.

5.4.14 Public and private realms

According to Havelkova (2008), in patriarchal societies, there are two realms, namely, public and private realms. Havelkova (2008) explains that the public realm, with regards to the perspective of gender studies, refers to surroundings that are inspiring towards an individual's socio-economic growth. These are, among others, education, business, and politics. Havelkova (2008) adds that the private realm refers to the environments that are socially fabricated to limit females' development.

Regarding realms, participants reported their experiences of realms as follows:

5E (female):...Leadership for females is not easy in the African culture, and it doesn't matter where you are. Look at the ex-principal I had in the other school I taught at. She tried her best ukonyusa umgangatho (to raise the standards) of the school. But whenever we were in meetings, the male teachers would tell her that her ideas are clearly coming from a female perspective and that she must consult them every time she has an idea so that they can tell her if it will work or not. She resigned after about 6 months.

2B (female): Females could not get these work permits because they had to be signed in either by their husbands or their parents in cases where they were unmarried. This requirement presented problems because most of the females lived with oomasihlalisane (partners with whom they were not married to).

3C (male): Female learners are not serious by nature and can never lead. In the computer room, they either play with their hair or nails.

5E (female): Why fight the issues? [of male dominance] They have a history.

2B (female): I think men get threatened by females who do not fit into the female role and tries to be a “man”, like driving a truck.

From the above discussion, patriarchal society’s enforcement of public and private realms can be surmised as follows: females are limited in what they can or cannot do in a public sphere; face antagonism whenever the attempt to break into traditionally male careers; and public and private realms are sometimes determined by legal entities.

5.4.15 Gender-role stereotyping

Gender stereotyping is defined by Joiner *et al.* (2006) as certain understandings within societies that pre-conceive capabilities of males and females, and thereby assign roles as determined by those pre-conceived capabilities. With regards to gender-role stereotyping, it seems as if all participants have experienced some sort of gender role stereotyping, whether as perpetrators or recipients, and they reported as follows:

1A (female): ...when I was in school, we tended to believe that science is for male learners and not female learners.

3C (male): I think they [female learners] should concentrate on subjects that will not break their pretty heads and leave technology alone.

5E (female): I was a woman; all I knew was to clean, cook, look after kids. Why would he think I can drive a truck? I really felt insulted.

1A (female): In those days, we did not mind or question the stereotypes; we were simply happy that after school one will either be a teacher or a nurse. Nowadays, there are more choices for female learners, including technology and using this for learning, and I think the availability of choices is very confusing for the female learners.

2B (female): You see...the female learners now have to balance their own community and home values of what it means to be a Xhosa girl with the many open choices that exist, and in most cases, they cannot cope.

6F (female): Female learners should leave science and technology to the male learners. Also they are not coping and they are there as a waiting station to get a guy that's going to marry them...

From the above discussion, the following perceptions regarding gender role stereotypes come to the fore: culture is used to enforce gender stereotypes; female learners are seen as lacking abilities to venture into science and technology subjects; and Xhosa female learners do have limited career choices due to socio-cultural conditioning.

Moreover, the responses above show that: males are encouraged towards careers that intensify their power over females; teachers hold traditionally based stereotypes against female learners who are doing technology-based courses; and female learners in technology-based courses are viewed as not fitting in with the gender role stereotypes assigned to them by society.

5.5 Socialization

Socialization is defined by Papallia (2003) as a continuing process whereby an individual acquires a personal identity and learns the norms, values, behaviour, and social skills appropriate to his or her social position.

5.5.1 Socialization as a process

Seidner (2009) explains that throughout the individual's growth, there exists a process of socialization and that people attain experiences that teach them lessons and potentially lead them to alter their expectations, beliefs, and personalities through the socialization process.

5.5.2 Agents of Socialization

There are many agents of socialization; however, for the purposes of this study, the researcher focused on the following agents: family, religion, culture, and language. Participants seem to have all been influenced by the various socialization processes that they went through in their lives, and they reported as follows:

5.5.2.1 The family as an agent of socialization

1A (female): *For me it was a very good childhood because I did not know anything other than the type of life that had rules. Then my father died so my mother took all of us four kids to live with her grandmother in Mdantsane. That's when my understanding of men and females' roles started getting confused.*

3C (male): *My female learners know that their families expect them to behave like female learners in every corner of their lives, be it school, church and so on.*

2B (female): *Families also force the female learners to look up to the brothers for protection and guidance. For example in my school, if the learners have to attend ikhaka (concert), the parents give the spending money to the boy to keep.*

4D (male): *My mother, funny enough, is the one who trained my sisters to respect me so much, spoil me, and call me Bhuti (big brother) although I was much younger than them. If my parents attended ingqungquthela (church event) or mtshato (wedding), I was put in charge of the house and the money was kept by me...we are taught that it's (dominance over females) our right. But I'll tell you something suster (sister), females don't mind it...*

5E (female): *...men in our village always view females as not clever, so any idea you present to the Chief as a woman, you have to present it through his iPhakathi (right hand man). By the time it [the idea] reaches the Chief, it's a different way than how you said it and it's dismissed.*

5E (female): *They [husbands] contribute ubudoda (manhood) and isidima (dignity) of the home. Have you ever seen how undignified a house without a man is? As long as there is a man in the home, there is dignity...*

2B (female): *...these boys [newly circumcised male learners] know that even as a teacher, I have to know my place as a woman and not claim*

authority over a man whether the man is older or younger than me. And you can see how the mothers and fathers of these boys treat them like kings.

Regarding the family as an agent of socialization, the following gender perceptions emerged: patriarchy lessons are learnt in the family where the head of the family is a man or the father; the home is influential in socializing male learners as superior and females as inferior; and behaviour is seen as a very important factor that determines whether female learners and male learners do fit in with their set socially constructed roles by their families.

5.5.2.2 Religion as an agent of socialization

The Oxford dictionary (2007) defines religion as the belief in and worship of a superhuman controlling power, especially a personal God or gods. In the African context, specifically the Xhosa culture, Mndende *et al.* (2008) explain that religion is not only seen in terms of the Western churches, but also in terms of the practice of worshiping the ancestors (*ukunqula izinyaya*). In terms of Christian religion, Palm-Forster (2000) points out that the Bible, through various verses, is also believed to play a role in promoting socialization through gender. According to Palm-Forster (2000), there are various contradictions within how societies refer to the Bible to support gender discrimination against females.

Many participants share their gendered experiences of religion thus:

3C (male): In addition to being a teacher, I also am a spiritual leader in my church, and the females and men have different roles in the church. The females run Sunday school and ensure that the church is kept tidy and neat. The men focus on more serious things such as raising money for the church, conducting funerals and weddings and the sermons. Even the Bible says that the man is the head, and we must respect this.

4D (male): In my school's assembly, only men can lead through prayer and then the female teachers are only responsible for leading the singing. The principal explains that this rule is guided by the Bible and always quotes the Adam and Eve story that if God had wanted females to be in charge, then He would not have put Adam in a leadership position.

1A (female): I can tell you that I also fall into that category of females that accept men as superior. This happens in church, in the staffroom, in supermarkets, it's all part of my life and it's no use fighting it.

From the above findings, the following gender perceptions regarding religion came to the fore: the Bible is mostly interpreted to suit the issue of male dominance and tasks allocated to females in churches relegate them to gender role differentiation of inferior positions.

5.5.2.3 Culture as an agent of socialization

Culture, according to Lamla (2000), refers to the cumulative deposit of: knowledge, experience, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, spatial relations, concepts of the universe, material objects and possessions acquired by a group of people in the course of generations. Within the context of this research whose focus is on gender, Taylor's (2006) assertion that culture shapes and upholds meanings of gender by advancing biological sex with social significance was adopted.

All the participants have experienced culture through gender expectations and reported as follows:

2B (female): According to our Xhosa culture, many customs allow men more decision-making powers. They are given positions as heads of households where there is no father-figure. The female siblings therefore end up accepting the domination of their brothers, and this extends to our schools.

4D (male): Suster [sister], I can't change our society and culture. It is what it is. These female learners come to school in grade R already knowing their place in this world, and I am not willing to change that because there is the father and the uncle and the brother and the mother who supports the fact that a girl should be like this and a boy should be like this. That's why I think this thing of trying to promote computers for female learners is a wasted project.

1A (female): *Our African or Xhosa culture says we should be respectable and respectful as females. We can never compete with men because they have their freedom that started at the time of our grandfathers and there is nothing we can do about this.*

5E (female): *Female teachers are not allowed to punish male learners from circumcision school.*

6F (female): *Female learners are taught to embrace the culture in female initiation schools; they must be proud Xhosa females who will take care of their husbands.*

2B (female): *Male learners sit far from female learners whom they suspect is on periods because culturally, this makes male learners weak.*

4D (male): *From Grade R, these female learners come from homes already knowing their place in this world.*

4D (male):... *this thing of computers for female learners is a wasted project.*

5E (female): *Male learners shout at female learners who sweep the e-learning classroom in their presence. Dust is a threat to their manhood.*

1A (female): *Men are served first in a cultural gathering.*

From the above responses, the following gender perceptions of culture emerged, namely that culture is a powerful promoter of male superiority and influences females to believe that they can never compete in a man's world through careers such as those that are technology-based.

In the responses below, gender perceptions on culture are further unpacked through sub-themes of culture. These sub-themes of culture are the *belief systems* and *customs and rituals* practiced in traditional Xhosa communities.

5.5.2.3 (a) Belief systems in the Xhosa culture

Rudwick and Shange (2006) explain that the belief in ancestors (*izinyanya*) plays an important part in respect (*hlonipha*) and, as such, is understood as

more than merely traditional codes of behaviour, but rather as a kind of spiritual conviction. From a feminist perspective, respect (*hlonipha*) seems to embody ambiguities, according to Thetela (2002).

Responses regarding belief systems that are prevalent in their societies and extend to the schools below are shared thus:

6F (female): ...there is a belief that the dust that comes as a result of female learners sweeping is bad luck for male learners. It presents a threat to their manhood; that is why we have to punish female learners when they sweep the computer lab just before the e-learning class time.

3C (male): If a boy violates a girl like maybe raping her, the boy's family pays a goat to the girl's family and a bottle of brandy to apologize and the girl's family does the ceremony and cleanses the girl for prevention of further bad luck.

2B (male): For example, girls sat on the one side of the room while male learners on the one side whether it was school, church and so on. Girls did not eat certain foods like eggs because they would be fertile and get pregnant easily if they happen to have sex before marriage.

6F (female): Newly circumcised male learners cleanse their initial sperm following circumcision through having sex with many female learners.

5E (female): A husband cannot share a bed with his wife when she is menstruating.

From the responses above, the gender perceptions regarding cultural beliefs emerged, namely, cultural beliefs lead teachers to fully embrace and apply the gender-based belief systems that are practiced in their communities within their teaching practices.

The second sub-theme of culture as an agent of socialization is discussed below, and this is customs and rituals practiced in the Xhosa culture.

5.5.2.3 (b) Customs and Rituals

A definition of rituals and customs that is adopted in this study is from the Blackwell Encyclopaedia of Sociology (2009) which states that a ritual is a sequence of activities involving gestures, words, and objects, performed in a sequestered place, and performed according to a set sequence. Durkheim (2009) expatiates that rituals are varied and include not only the numerous worship rites and ceremonies of organized religions and cults, but also the rites of passage of certain societies, atonement and purification rites, oaths of allegiance, dedication ceremonies, coronations and marriages and funerals.

There are many rituals practiced by the amaXhosa, as per Peires' (2010) assertion. Below is a discussion of the findings of the rituals that relate to the focus of this study, which is gender. These are labelled as ritual 1 to ritual 6 and are: male initiation, female initiation, virginity testing, stretching of the labia, cutting of fingers, and lastly, the rituals around marriages.

- **Ritual 1: Male initiation**

According to Mtuze (2008) the male initiation ceremony serves as an entrance through which the Xhosa adolescent male must step in order to become a respected member of society, or as it is called among the Xhosa, 'to attain manhood'. For the most part, the initiates are very esteemed, and may even show conceit, according to Maholwana-Sotashe (2007).

Participants' responses show the manner in which the position of a male initiate is revered in the Xhosa culture at the expense of females :

4D (male): Because of our customs like ukoluka (male circumcision ceremony) and others, we have a history of men as leaders.

6F (female): These female learners like to scream abuse but they are always throwing themselves at these rude male learners [initiates].

2B (female): Newly circumcised male learners are very disrespectful towards the female learners and the teachers.

1A (female): They [newly circumcised male learners] call the female learners *izigqwathe* [snots].

4D (male): *Ey suster* [hey sister], as I said, the female learners don't mind. You know when these male learners come back from *esuthwini* [circumcision school], they are taught not to sleep with their favourite girl since *izakwenza izothe* [he might not like her much after the sexual intercourse] and they might end up breaking up. It is believed that the 1st sperms ejaculated after circumcision by Xhosa culture is contaminated. Believe you me, these female learners fight to be number one to sleep with this guy even if they know about this theory. To them it's an indication that they are the best girlfriend, but to the guy, they are the least favourite.

3C (male): I really did not like beating up females but I had to do it so that I can be considered a man after my circumcision ceremony. I used to feel so bad about it and want to say sorry to them but then I would be laughed at coz (because) the same girl would tell the whole school about the apology.

From the above responses on the male initiation ritual, the following gender perceptions emerged, and these are that male initiates consider females as inferior, and some initiates are considered to be 'real men' through administering physical beating or violence to females.

The discussion below proceeds to the second Xhosa ritual which is the female initiation.

- **Ritual 2: Female initiation**

Mbiti (2007) explains that the ritual of female initiation (*intonjane*) is considerably shorter than the male initiation ritual. There is no actual surgical operation, and the girl to be initiated (also called *intonjane*) is secluded for a period of about a week. Peires (2007) explains that the female initiation ritual is, traditionally, a key to socialization of female adolescents in the traditional Xhosa culture.

Some participants shared their indirect and direct experiences of female initiation as having influenced their perceptions of gender:

2B (female): The initiation schools are very popular because this is where the female learners meet with other older female learners and females to guide them through the process of womanhood since they are not free to discuss these things with their parents.

1A (female): The initiation schools are liked by female learners because they get to socialize and talk about things that they feel are important to them.

1A (female): During the female initiation periods, most of the female learners miss school. Some become initiates, and some elect to be the chaperones of the initiates.

2B (female): When the female learners do come back from the initiation ceremony, they do not attend regularly; you can see that their minds are just not at school, shortly after, you will hear that she got married due to her marketability.

2B (female): You see...the female learners now have to balance their own, community, and home values of what it means to be a Xhosa girl who will soon be someone's wife.

From the above responses, the following gender perceptions regarding the female initiation ritual came to the fore, and these are that: female learners do not attend school regularly and miss school to attend female initiation rituals; female learners are not motivated to attend the e-learning classes since the initiation schools present a much more interesting option; and female initiation rituals sometimes compromise the education of female learners.

Below is the discussion regarding the third Xhosa ritual which is virginity testing.

- **Ritual 3: Virginity testing**

According to Mndende *et al.* (2008), virginity testing (*ukuhlolwa*) is a public ceremony that is prevalent in traditional Zulu and Xhosa cultures to ascertain

female sexual purity and worth. Mndende *et al.* (2008) explain that generally a female is believed to be a virgin and, therefore, sexually chaste if her hymen is intact.

Some participants shared their indirect and direct experiences of the virginity testing ritual as having influenced their perceptions of gender:

1A (female): At puberty, we female learners were gathered by the females and went through vaginal inspection. This was a matter of pride for us because we were praised for keeping ourselves pure for our future husbands.

1A (female): We knew that if we were pure, our families would be proud of us as that meant a higher bride price (ilobola) for our parents. If a boy approached you for sex, you were told to tell him that andinakho ukudlala ngeenkomo zikatata [I cannot play around with my father's cows (the vagina)].

F6 (female): Ever since one of our female students was targeted and raped after virginity testing, not many female learners are keen to share their virginity status for fear of targeted rapes of virgins.

From the above responses, the following gender perceptions regarding virginity testing emerged, and these are that female learners are sometimes pressured to go for virginity tests in order to reassure the family and would-be husbands that they are pure enough to improve the family's financial standing through a good bride-price and virginity testing exposes the female learners to HIV positive rapists and makes them vulnerable.

The fourth Xhosa ritual whose findings are discussed below is the stretching of the female genitalia.

- **Ritual 4: Stretching of the female genitalia**

Flanagan (2010) explains that the stretching of the labia is a practice that is done by those traditional Xhosa families whose ancestral ties are linked to the Sothos, a tribe that predominantly lives in Lesotho, but also resides in some areas of the Eastern Cape where this study is conducted. Flanagan (2010)

explains that female learners are instructed by their female relatives and mothers to pull their labia periodically until it is stretched. Flanagan (2010) goes on to say that these female learners are further given lessons on womanhood and that it is crucial that they are able to please a man sexually using their elongated labia.

Some participants shared their indirect and direct experiences of stretching of the female genitalia ritual thus:

2B (female): In the village, there are still some female learners and females who practice this but the nurses have told people to stop since it causes vaginal infections. The men were not happy with this announcement as they believe that sex is nicer with a woman who has elongated labia.

6F (female): The few female learners in my e-learning class who have gone through this ritual mostly miss classes on the days that they are having periods. They always come to explain to me that because of the sensitive nature of the stretched labia, they chafe easily from the sanitary towels and therefore it is easier for them to deal with the menses [periods] at home rather than move around, which is what they are required to do at school.

From the above responses, the following gender perceptions regarding stretching of the female genitalia ritual emerged, and these are that through culture, females are subjected to physical violation for the purposes of male pleasure to the extent that their female learners' education is affected.

Below, the fifth ritual of finger cutting is discussed.

- **Ritual 5: Finger-cutting**

Mndende *et al.* (2008) explain that finger-cutting is done in both females and males in traditional communities, but predominantly so in females. Manning (2010) explains that the practice of cutting off the female learner's finger is done as a medical intervention when a girl (more so than male learners) is seen to not be well, and it is believed that this cutting off the forefinger will cure her.

Some participants shared their indirect and direct experiences of the finger-cutting ritual as:

4D (male): Three of my female learners who have their fingers cut traditionally are unable to type like other students. This makes them slow and they are always left behind by other students.

5E (female): I think the female learners who have their fingers cut become too self-conscious when they have to type in the e-learning classroom.

From the above responses, the following gender perceptions emerged, and these are that finger-cutting makes it challenging for the female learners to work on a keyboard; slows down the female learners' typing and affects the performance and perception of female learners towards e-learning;

Findings pertaining to the last ritual or practice are on controversial Xhosa marriage practices. They are called *controversial* because according to Manning (2010) some of the processes in these marriages unconventionally point towards female abuse by males. These marriage practices are: the bride price, forced marriages, polygamy, and wife inheritance.

- **Ritual 6: Controversial Xhosa marriage practices**
 - **The bride-price**

Payment of the bride price is described by Mndende *et al.* (2008) as a practice whereby the family of the groom gives cows or cash to the family of the bride as a sign of goodwill and concretizing the relationship between the two families. According to Peires (2010), during this ceremony the bride is informed, in traditional families, that the family is expecting a baby within the year, and that if she does not bring forth an heir, she should be aware that her husband is allowed to bring a wife who is willing to carry the family name forward. These sentiments are carried around and acted out in traditional communities in various ways.

Some participants' responses on their experiences of the bride-price directly or indirectly are that:

3C (male): you [female learners] must not be seen as cleverer than male learners, especially with regards to things that are known as male learners' stuff. This may put male learners off and risk the girl losing future marriage prospects and getting a good bride price (lobola).

4D (male): That's why sometimes I understand why the female learners are so passive at school and in my e-learning class. It's like, why bother? As soon as the father gets the right offer of the bride price, she'll be given away anyway.

From the above responses, gender perception regarding the bride price ritual emerged, and these are that families put pressure on the female learners in order to get a good bride price and bride-price dynamics translate themselves into poor performance and lack of interest of the female learners in the e-learning classroom.

The next findings discussed on controversial Xhosa marriage practices are on forced marriages.

- Forced marriages

Forced marriage, according to the Blackwell Encyclopaedia of Sociology (2009), is a marriage in which one or both of the parties is married without his or her consent or against his or her will. In traditional Xhosa culture, forced marriage (*ukuthwalwa*) was, and still is accepted to some extent. According to Xaba (2009), this practice is one of the major causes of high dropout rates for female learners schooling in rural areas.

Respondents shared how forced marriages affect their gender perceptions and their overall existence as females thus:

2B (female): My heart broke last year when three of our best female learners dropped out of school because of forced marriage. What made it worse for this girl was that the marriage was organized by her uncle since she had no father... also worse is that the uncle's daughters were all at university but he decided to make money through this poor child who was the one of the few bright female learners in my e-learning class.

1A (female): I don't think any mother in the village has a plan to protect her daughter from forced marriages. We all pray that it just doesn't happen. The only other choice is that we'd move away from the village. Who wants to stay in the squatter camps and lokshin (township). I still think it's better to live here because this is the only thing we know. The only people that have a chance for better things is our kids, that is if they don't get married here in the village.

5E (female): The girl I told you about...the one who did not do e-learning assessments. She missed school towards the end of the e-learning project because she had escaped forced marriage arranged by her father and was hiding in another village in a relative's house who was also taking care of the cuts and bruises that she got from the beatings. Uyabethwa yho! [they beat you up!] when you resist abduction so it's just better to go with them and hope your new husband is at least your age and that awusiwa esithenjini [they are not taking you to a polygamous marriage].

From the above responses, it appears that the practice of forced marriages affects the schooling of female learners and influences gender perceptions, namely: forced marriages play a role in the dropout rates of the female learners in the e-learning class and female learners are sometimes violated through rape in forced marriages.

The third controversial Xhosa marriage findings are discussed below, and these are on polygamy.

- Polygamy

According to Manning (2010), polygamy or polygyny (*isithembu*), the custom of taking more than one wife, is practised in many traditional communities in South Africa. In terms of the South African legislation, the South African Customary Marriage Act (1998) allows black African males to have more than one wife. Peires (2007) argues that most polygamous marriages are interlinked to forced

marriages, especially for female learners, and most female learners drop out of schools when their fathers arrange such marriages for them.

From the responses of this participant below, the following indirect experience of polygamous marriages was shared:

5E (female): These men [the ones the school female learners are forced to marry] are much older than these female learners; they mostly already have wives, and only see the wives in December [since they mostly work in Gauteng] to make them pregnant so that when they leave, they are sure that their new wives will not run away.

5E (female): Uyabethwa yho! [they beat you up] when you resist abduction so it's just better to go with them and hope your new husband is at least your age and that awusiwa esithenjini [they are not taking you to a polygamous marriage].

From the response above, the following gender perceptions from polygamous marriage are that polygamous marriages, just like forced marriages, play a role in the dropout rates of female learners and female learners do not have a choice in their future, which is decided by the father and future husband.

Below is a discussion on findings regarding wife inheritance, which is part of the controversial practices of Xhosa marriages.

- Wife inheritance

According to Bam (2009), in the event of a wife being unable to conceive, the options of taking another wife by the husband, and wife/spouse inheritance (ukungenwa) are explored. Mndende *et al.* (2008) explain that wife inheritance also occurs in the event of the death of a husband. Bam (2009) points out that wife inheritance, therefore, dictates that the wife's late husband's brother or other male relative be appointed to marry the widow:

From the singular response of this participant below, the issue of wife inheritance is perceived thus:

5E (female): So far, none of the female learners in the school have gone through this practice, but it's something that married females in the traditional rural areas pray that it does not happen to them. So what I am saying is that these students are aware that this is something that can happen to them when they are married.

From the response above, the following gender perceptions regarding wife inheritance came to the fore: females have no say in the issue of wife inheritance and it is seen as inevitable by the females who live in rural traditional communities and the female learners.

The discussion below moves to findings with regards to the fourth agent of socialization which is language.

5.5.2.4 Language as an agent of socialization

According to Gergen (2011), language is a dominant tool that socializes people globally. In keeping with this study's focus which is gender perceptions, West and Zimmerman (2008) discuss how, when males and females interact using language, they reinforce essential gender differences and therefore maintain a power difference. According to Mbiti (2007), this position is highly valued in African communities and communicated through language. In the Xhosa culture, the language of respect (*hlonipha*) is influential in fostering gender differences, as per Peires' (2007) assertion.

Respondents reported how they experience language as influential in how they perceive gender:

*1A (female): When I teach Life Orientation, I cannot mention private body parts as a Xhosa female and have to use alternative (*hlonipha*) words.*

2B (female): When the female learners come back from initiation school, they are given new names so that they gain respect. Such names have an association of their planned new life such as marriage and child-bearing.

2B (female): *Male learners that have many girlfriends are called player (ulewu) while female learners with many boyfriends are called sluts (ihule) and these are names predominantly used around the school by both female learners and male learners.*

5E (female): *We get cases in the school of a boy beating up a girl; the boy's explanation is always ebendihulela [she was sleeping around].*

1A (female): *They [male initiates] call the female learners izigqwathe [snots], which is a name that is supposedly meant to be respectful, yet it belittles females.*

3C (male): *My sisters still call me bhuti [big brother] even though they are now married and I am younger than them because I am considered the head of the household.*

From the above discussion on language as a socialization agent, the following gender perceptions emerged that in patriarchal societies language is used to forbid females from using certain words and indoctrinates females into believing that they are not as powerful as males.

Moreover, in schools some female teachers cannot use certain words that are considered taboo for use by females and, therefore, the quality of education is compromised wherein learners only learn the respect words for private parts adopted from the female teacher.

Schools are discussed as elements of pedagogy where social construction of gender which possibly affects e-learning of female learners occurs. In addition, factors that affect e-learning proficiency of female learners are positioned in schools, as revealed by literature in Chapter 3.

5.5.2.5 Schools

According to Mwamwenda (2010), schools are very influential spaces for the social construction of gender. Mwamwenda (2010) adds that while such gender construction occurs in the home, schools carry on to communicate the identities that learners are required to assume in the personal, civic, and vocational opportunities that are open to them.

The following factors that have been shown by literature and practices which affect e-learning proficiency in female learners are discussed below. These are teachers; curriculum; peers and gender-based violence and harassment in schools; support for female learners.

5.5.2.5 (a) The teachers

In response to how the teachers interact with different genders in their e-learning classes, the following responses were documented:

5E: Female learners are expected to be ladies, and male learners are allowed to speak out more often because they are naturally hyper.

2B: They [female learners] are very lazy and passive! This makes me very annoyed and I shout at them more than I shout at male learners. Sometimes I think no wonder male learners shout at them and do not respect them.

4D: I am more comfortable with interacting with male learners. Female learners often annoy me by being very chit chatty, not having any direction or goal and just being too slow to understand technology.

5E: That's why I always tell these female learners to treat the male learners as their allies rather than enemies. They will learn a lot from them.

Female learners are viewed scornfully and negatively by some e-learning teachers as per the responses below:

3C (male): Once they [female learners] struggle, I ask one of the male learners to assist, and they [female learners] still struggle and get left behind. Since I have a syllabus to finish, I can't wait for them, especially with the big classes that we have.

5E (female): (but nowadays) female learners are more sluttish. You should see them when they have a new G-string! You know the ones with the small fake gold jewellery they buy kula (in that) shop in Vincent? Shuuu! (Ouch!) It's embarrassing and disgusting, I always feel sorry for

the male learners and the male teachers in the classes when these female learners bend over to pick up something to deliberately show this G-string!

3C (male): Nowadays the female learners are allowed to wear grey pants so they deliberately don't put belts so that these can show their G-strings.

3C (male): Female learners in the school are useless; all they do is get pregnant with sugar-daddies and male learners so that they can enjoy grant money.

4D (male): Female learners use the e-learning classroom as a waiting station until they find a man to marry them.

4D (male): I think this thing of technology for female learners is a wasted project.

5E (female): I'll propose that from 2015, female learners should go and do other subjects; they are not coping with e-learning.

In some responses, the issue of disrespect of female teachers and female learners by male learners is reported as:

1A (female): What this means is that on the day that there is no male teacher, the male learners do as they like. Sometimes it is a challenge to leave my class to go look for a male teacher.

2B (female): That means the male teacher has to leave his class to punish one student, meaning all the other learners have to suffer because of one learner, so I just leave it. Sometimes even if I go to look for the male teachers, one will say "try so and so, I'm busy", then the other one sends you to another one until you give up; Also, they sometimes ask you to tell them what happened and just laugh and say that's not a big thing and then you feel so stupid for making a big deal of nothing.

4D (male): Female learners specifically like those types of male learners. If you came and told me that you have caught a certain boy touching a

girl's breast, the girl would deny that, just to show that they want to be desired because that gives them a boost.

6F (female): When a boy impregnates a girl, he gets new respect from friends since he is now a father and considered a man, and this puts pressure on the others to impregnate female learners.

From the above responses pertaining to teachers' and peers' interaction with learners in the e-learning classroom, the following gender perceptions emerged in the e-learning classroom: teachers favour male learners over female learners; they seem to feel that female learners deserve the ill-treatment that they receive from male learners in the e-learning classroom; and they do not seem patient enough to allow female learners an opportunity to catch up with the e-learning syllabus.

Moreover, the responses show that in the schools teachers transfer their personal socialization experience that has been very deeply entrenched in role differentiation and there is no support for female colleagues from the male colleagues to curb disrespect shown by male learners.

Responses regarding the curriculum, which is another factor that was identified by literature as affecting e-learning proficiency of girls, are discussed below.

5.5.2.5 (b) The curriculum

According to Mwamwenda (2007), the school curriculum is ever-changing and is divided into: the hidden curriculum (which is covert), the academic curriculum (formal school curriculum), and the extramural curriculum (sports and hobbies). Manning (2010) argues that schools socialize female learners and male learners in a manner that encourages gender differentiation through all curricula.

Some participants' responses on the influence of the curriculum regarding gender stereotypes were shared as follows:

3C (male): Our curriculum is made such that male learners and female learners naturally choose subjects that will help them in future. For example, no girl is in the woodwork or agriculture class and no boy is in Tourism or Home Economics.

5E (female): Male learners are always very good with computers and have to assist the female learners in the e-learning class to catch up, and this frustrates the male learners who always want to move on.

3C (male): They [female learners] should stick to other subjects such as... and not try to go to technology.

From the above responses regarding the curriculum, it emerged that teachers perceive male learners to be naturally good with computers and perceive female learners to be unsuitable for e-learning. It also emerged that teachers feel that girls should rather not attend e-learning classes as they are not performing as well as the boys.

Below is the discussion on the issue of the gender-based violence that was discussed in Chapter 2 as a possible factor that affects schooling of females in rural and semi-rural areas. Inclusion of gender-based violence in this section is done against the argument that if, as literature points out, many female learners in traditional patriarchal societies drop out of school due to gender-based violence such as bullying of female learners by male learners and finger cutting, this might indirectly affect e-learning proficiency of female learners. This is because the schools in this study are situated in similar environments.

5.5.2.5 (c) Gender-based violence and harassment in schools

Burton and Leoschut (2012) claim that the term *school-based violence* is the type of violence that takes place within and outside the school. Burton and Leoschut (2012) explain that there are many forms of gender-based violence, and these are physical, verbal, psychological, and overall bullying.

All participants' responses reflected their experiences regarding gender-based violence; these are shared as follows:

6F (female): We get cases in the school of a boy beating up a girl; the boy's explanation is always ebendihulela [she was sleeping around].

3C (male): I told you that female learners are not allowed to my office to ask questions about the computer class and I said to you it's for their protection since there is all this thing about violence. I said it would be

best if the female students never went to my office because it would be easy for them to say I raped them especially with my record.

Some responses pointed to the fact that female learners are equally responsible for the abuse they receive from males.

3C (male): ...us men are unpredictable. A girl might get into the office with a short uniform and suggestive smile and us being weak, I sleep with her and then ... (shrugs) I can't take that risk.

3C (male): ...It's all very confusing because females also play these games so you never know what's what until it's too late. So that's why I would rather deal with the female learners inside the computer lab with other learners and we finish there. Suster [sister] us men are not as strong as we pretend to be, so don't judge us harshly; that's all I can say.

5E (female): I don't blame the male learners for treating the female learners the way they do.

6F (female): ...the female learners do not help the situation either by being cheeky and bitchy and running after the same abusive male learners.

In some cases, the respondents shared instances of gender-based violence which is in the form of verbal abuse in their schools.

2B (female): The problematic newly circumcised male learners are disrespectful to all females and call female learners izigqwathe (snots) since this is part of the new vocabulary acquired from circumcision school, as part of culture.

1A (female): The male learners swear at the female learners for sweeping the computer lab only when it is time for the e-learning class because the dust affects their manhood due to traditional beliefs.

2B (female): Male learners that have many girlfriends are called player (ulewu) while female learners with many boyfriends are called sluts

(ihule) and these are names predominantly used around the school by both female learners and male learners.

2B (female): In my school, female teachers are not allowed to punish male learners who have just returned from initiation school. These male learners are very rude to female learners and female teachers.

1A (female): ...male learners also shout at female learners for not bringing in fresh drinking water for the class, especially because the computers make the lab so hot and they [male learners] get thirsty.

Responses with regards to gender-based violence in the e-learning classroom, in particular, were shared as follows:

5E (female): Male learners bully female learners to give up a “fast” computer to a boy because “slowness” is a woman’s thing.

3C (male): When I ask the male learners to help the female learners in the computer lab, sometimes I overhear the male learners shouting: “How many times must I show you how to do this?”

4D (male): Female learners are often bullied by male learners to move over to a spot that is exposed to sunlight since it is not a manly thing ukugcakamela ilanga (sunbathe).

1A (female): Male learners line up first so as to get to the best computers.

6F (female): Female learners just do not come to the e-learning lab much; I guess they are tired of all the fighting for computers with male learners.

5E (female): There is a lot of give and take between male learners and female learners at schools that some people might misinterpret as abuse.

2B (female): These female learners do not like a man who does not beat them up; that’s why most teachers do not worry when these male learners rough them up a little.

From the above discussion, the following issues regarding gender-based violence that occurs in the schools emerged, and these were that teachers were socialized and conditioned to accept the violent behaviour of male learners towards female learners and, in some instances, view female learners as capable of fabricating incidences of sex-based harassment,

In the e-learning classrooms, in particular, female learners are bullied into giving up the good computers to male learners and male learners push to be the first to access the computers more than female learners and gender-based violence is trivialized by teachers.

The final factor identified as possibly affecting the e-learning proficiency of female learners is support of female learners in the e-learning classroom.

5.5.2.6 Female learner support in the e-learning classroom

According to Isaacs (2007), learning through using technology is a positive way in which to socialize young minds towards the unlimited possibilities of personal, academic, and economic growth. However, according to Mlitwa (2009), whilst the notion of global e-literacy and e-learning is fully embraced in first world countries, in some third world countries which are steeped in traditional and patriarchal existence, there exists some form of resistance regarding the endless possibilities that technology is likely to bring to their communities, specifically to females.

The perceptions of the teachers below regarding their perceptions of technology and gender are as follows:

5E (female): Female learners should not be too much with computers or else they will learn bad manners. Already, our Hlonipha (respect) language is dying, how much more with this internet?

6F (female): Female learners should leave science and technology to the male learners. Also they are not coping and they are there as a waiting station to get a man that's going to marry them...

3C (male): I think the more the male learners excel in technology and sciences, the more female learners give up hope.

4D (male): *These female learners are useless with computers. I treat them mostly like male learners but then again I think they should concentrate on subjects that will not break their sensitive heads.*

1A (female): *...male learners do not like sitting together with female learners in computer classes. This separation is natural in the village where men sit separately from females.*

2B (female): *Whenever they [male learners] suspect a girl of being in periods, they sit as far away from that girl as possible in the e-learning class.*

5E (female): *In the school, when I ask the learners to walk to the computer lab, the male learners line up first because they say that traditionally, men always lead the way. The female learners simply follow because they are not interested in fighting; and all this is because the male learners want to grab the best computers for themselves and don't want to share with females.*

4D (male): *These [incidences of disrespect] are directed to female learners from male learners; sometimes the male learners expect the female learners to give up their chairs just because the boy's chair is too close to the sunlight from the window because ukugcakamel' ilanga yinto yabafazi [only females care to sunbathe]. Sometimes it is because they want the faster-loading computer because they don't want a slow one since they say slowness is associated with females.*

As a result of the many challenges that female learners face and lack of support in the e-learning classes, some responses show that female learners lose interest in attending these classes.

6F (female): *They [female learners] seldom even come to the computer lab because I guess they are just tired of the whole thing of fighting over computers.*

5E (female): *in my e-learning class, they [female learners] are interested only in the first ten minutes, and then they begin to struggle.*

D4 (male): Next year I will propose that the female learners do something else in the place of e-learning classes because they are not coping, the male learners are frustrated, and as a teacher I find it frustrating to always balance learners that are far behind with those that are faster.

From the responses above on lack of support for female learners in the e-learning classroom, the following gender perceptions came to the fore, namely: most teachers do not support e-learning for female learners and perceive female learners as incapable of developing computer skills through e-learning.

Moreover, in most schools, discrimination towards female learners in the e-learning classroom contributes to loss of interest in technology by the female learners, and the negative relationship between male learners and female learners seems to discourage female learners from coming to the e-learning classroom.

The next section presents data collected from the interviews with the District official. The District official's responses regarding the role that the Department of Basic Education (DBE) is playing towards support of gender-sensitive e-learning were important because he is responsible for running the Provincial office for curriculum management and is one of the three senior officials in Acting positions in the office of the Gender Focal Person.

5.6 Findings from the interview with the District official

The interview with the District official followed the same pattern as that of the teachers. The interviewer first moved from general questions that were aimed at establishing the District official's awareness of the concepts of gender-supportive learning. This moved to a discussion of the policy versus application of gender-sensitive education. Lastly, the questions probed the structures in place for monitoring and evaluation of gender-sensitive e-learning in Eastern Cape schools, particularly those in the rural, township, and informal settlement areas.

The following responses regarding the support given to the teachers to implement gender sensitive e-learning were shared by the District official:

Regarding his understanding of gender-supportive learning, he responded thus:

- *Gender supportive learning is learning that is in place to support learners of different genders.*
- *We are planning to have teachers go through training of mainstreaming gender into education.*
- *But then there is Life Orientation (LO) which takes care of gender supporting learning.*
- *The LO teacher teaches all kinds of 'soft' gender curricular that will enable the learners to understand and appreciate different genders.*
- *Not all the teachers were sensitised to the choice of gender sensitive content in textbooks in their schools.*
- *The subject teacher can be anyone, that is, it can be a new teacher who has no gender awareness skills.*

Regarding whether implementation of gender-sensitive e-learning is on par with the objectives of the White paper on e-education (DoE, 2004), he responded thus:

- *As a province, we are still struggling to implement the plans of both the White Paper on e-learning, and those of the strategic plans of Gender Mainstreaming. There are many bottlenecks in the Eastern Cape education as you might have read in the papers. These have something to do with infrastructural challenges and funding logistics.*
- *Though the department has good policies, we are still struggling with the implementation.*

Regarding the structures in place for monitoring and evaluation of gender-sensitive e-learning in Eastern Cape schools, he reported thus:

- *There was a recommendation to appoint such a monitoring body from national level, but to date, that appointment has not been done due to Human Relations (HR) logistics.*
- *The recommendation of the Gender Equity Task Team was that a gender focal person be appointed for each province to ensure that*

gender supportive and gender sensitive approaches to teaching and learning are put in place, and, of course, also for sustaining these.

- *Due to this vacant post of the gender focal person, Department of Basic Education in the Eastern Cape had no actual focused implementation agenda on gender matters, but that doesn't mean we are not trying.*
- *Currently, we have very limited staff members who attempt to carry out the duties meant to be carried out by the gender focal person, until that person and his team are appointed.*

From the above responses of the District official on the subject of teacher support from the provincial office with regards to gender supportive e-learning, the following issues emerged: there is no clear understanding of what gender-supporting learning is or should be; policies on gender (to mainstream gender) provincially are available on paper but not applied due to lack of the gender focal person; and issues of gender stereotyping and prejudice, gender-based discrimination and unfair discrimination are represented in all learning areas, but not specifically for e-learning implementation.

The next section presents data collected from the focus group interviews. In this study, focus group interviews were used in order to triangulate data from the interviews and questionnaires as per Denscombe's (2007) advice. It is, therefore, for this reason that the presentation of data in this section is not as extensive as that of the one-on-one unstructured in-depth interviews presented in the previous section.

5.7 Focus group interview findings

As mentioned in Chapter 4, this study used a sequential QUALI-quantitative research approach where the qualitative data was collected by means of interviews. Interviews were conducted with six teachers on a one-on-one basis and with the 119 learners in the form of focus group interviews in the six schools. The focus group interviews were conducted using both English and IsiXhosa since the researcher wanted to ensure that all learners participated and were not restricted by language barriers. All the learners in the focus group interviews

had participated in the e-learning project mentioned in Chapter 4, and the point of the focus group interviews was to elicit information regarding their perceptions of the e-learning experience around the context of gender in order to triangulate all the findings.

Table 5.1 below presents demographic data of the learners who participated in the focus group interviews.

5.7.1 Demographic information of focus group interview participants

Table 5.1: Focus group discussion participant profile

School	School location	Group	Gender	Number of participants per group	Total no. of participants per school
1	Rural	A	Female	12	22
		B	Male	10	
2	Informal settlement	C	Female	13	22
		D	Male	09	
3	Township	E	Female	11	16
		F	Male	05	
4	Informal settlement	G	Female	12	23
		H	Male	11	
5	Rural	I	Female	10	15
		J	Male	05	
6	Rural	K	Female	11	21
		L	Male	10	
TOTAL NUMBER OF PARTICIPANTS					119

5.7.2 Coding distribution of participants

For ease of data collection and given the sensitive nature of the responses from the participants, the focus group participants are presented under pseudonyms. As mentioned in Chapter 4, the researcher divided the focus groups into male learners' and female learners' groups in each school, with the resultant two groups per school. Table 5.1 above shows that the six schools are coded 1 to 6. The twelve focus groups are labelled A-L, and the table also shows the gender and the number of participants in each group. Therefore, when, for example, the researcher refers to a response from a female group from the 3rd school, the code is 3E. Similar to the teacher interviews, learner interviews were also captured in a coding spread-sheet in Microsoft excel, and the response categories of the learners were entered against the corresponding code.

The section below sets the scene by explaining how the focus group interviews were conducted before delving into the actual presentation of the responses.

5.7.3 The focus group interview schedule

All the respondents in the focus group interviews were asked the same introductory questions. Since focus group interviews, according to Mouton (2010), are flexible by nature, the probing questions that the researcher asked were determined by the responses of the individuals in the focus groups. The respondents were requested to reflect and respond to the following initial questions:

- a) Please share with us your perceptions of your e-learning experiences with regards to computer access, your peers, your teacher, your parents, your performance, and your school.
- b) What does the concept "gender-sensitive" mean to you?
- c) Let us discuss how you think differences between male and female learners (physical structure, attitude, family upbringing, roles, societal interactions, and culture) possibly affect academic success between these genders especially in the male-dominated subjects and technology-based careers.

It can be noted that the questions asked were open-ended, but the researcher took care to be as in-depth as possible by asking leading questions based on the

responses and probing further whenever she needed clarity. The researcher took notes during the interviews as agreed with the respondents. In addition to facilitating the groups, interviews were audio-taped; the researcher also took note of non-verbal responses within the groups, and these were recorded on the field notes exercise.

Although the researcher cites the responses *verbatim* in this section, for coding and categorising purposes, collected data was transcribed and translated *verbatim* from IsiXhosa to English. The researcher was cautious not to distort meanings in the process of translating from IsiXhosa to English.

5.7.4 Research findings from focus group interviews

Research findings from the focus groups are presented below in a similar format that was adopted for the unstructured in-depth interviews discussed above. The afore-mentioned format is that of themes and sub-themes which the discussion of the teachers' interviews was structured around.

5.7.4.1 Gender differentiation

The responses below from different male learners' focus group interviews points to their perceptions on gender differentiation with regards to competing for scarce resources:

2D (male): *It is very nice during these times [when female learners are absent] because you can do everything you want in the computer...*

4H (male): *Also the teacher covers the syllabus fast and we don't have to stop just so the female learners can catch up.*

1B (male): *The good thing is that you have your own computer....*

6L (male): *The teacher is nicer because there is more oxygen and is not frustrated by a big class.*

Female learners, on the other hand, seemed to share a different viewpoint from male learners regarding gender differentiation that occurs in the e-learning laboratory, and this viewpoint is illustrated in the responses from various female focus group interviews below:

6K (female): *that computer lab is always stuffy and hot whether it's winter or summer. Hay (No), I'd rather sit outside and breathe fresh air.*

3E (female): *The computer lab is always full and male learners do not mind always fighting for computers. We are ladies and don't like doing that.*

2C (female): *Even during Life Orientation, we tell the teacher that we do not want to do Computer Applied Technology or even Information Technology.*

From the responses of male learners and female learners regarding gender differentiation in the e-learning classroom, the following perceptions emerged that male learners resent female learners being in the e-learning class and would rather have a male learners-only e-learning class.

Female learners are not keen on attending e-learning classes and do not like the overcrowded atmosphere in the e-learning classes.

5.7.4.2 Gender-role stereotyping

Gender-role stereotypes are defined by Stephens (2012) as simplistic generalizations about gender attributes, differences, and roles of individuals and/or groups.

Participants in focus groups shared their experiences with regards to gender stereotypes as follows:

3F (male): *You see Mam, men are always ahead because they are very brave and explore. Look at Vasco Da Gama and this guy of Virgin Airlines... what about the guy of IBM? Tell me one woman who has come up with better inventions.*

6K (female): *Anyway if you do something a lot, you would be good at it, so the male learners because they are always at the computer room, they are good at computers. It's like practising Maths...*

3E (female): *Male learners learn fast, look at how they are able to drive just by watching someone drive a tractor, so handling computers in that*

e-learning class is nothing, they watch the teacher just one time and they are able to do things. Thina [us female learners] have to be told so many times before we understand technical things.

4A (female): Us female learners are happier just doing other subjects that are for female learners because we are good at those.

4B (male): Mam, male learners are naturally, better at things like Maths and Science than female learners, ask our teachers and they can tell you that. That's why they are struggling in the e-learning lab; it's just not for females, klaar [end of story].

1A (female): Really mam, they talk about our menstruation as if it is the worst thing. They say every time when a girl is not doing what the teacher says she must do, "haybo, uyamensa na wena? [What's wrong with you? Are you menstruating?]

From the responses above, the following gender-based stereotypes and perceptions come to the fore: male learners view female learners as temperamental and ruled by their menstrual cycle and both male learners and female learners hold gender stereotypes regarding the abilities of males and females, particularly with regards to e-learning and technology in general.

It should be noted that the themes discussed hereunder are those that emerged during the focus group interviews. For example, there were no responses that emerged that spoke to ritual 1 discussed in Chapter 2. On the other hand, the researcher recorded responses that were aligned to ritual 2, hence its discussion below.

5.7.4.3 Ritual 2: the female initiation

The female initiation ceremony (*intonjane*), according to Makaula (2010), is a rite of passage practiced by amaXhosa when the girl reaches puberty. Mabovula (2010) is of the opinion that female initiation ceremonies or rituals play a part in cultivating lack of interest in schooling in the initiates.

Focus group responses regarding the learners' experiences with the female initiation ceremony, directly or indirectly, were shared as follows:

1B (male): *They don't even bother coming to school emva kwentonjane [after female initiation rituals]. That shows they don't really have time for school. They become very crazy when that time [the period of initiation schools] comes just in case someone wants to marry them.*

2C (female): *We like intonjane [initiation schools] because it is our place as female learners where we are treated like proper females. They also give us proper females names, and you feel like umntu omdala [an adult] ready for the next step (giggling)*

4G (female): *...my intonjane [initiation school] name is Nomzi. The name means I am now ready to get married and have my own home with my in-laws. I like it because I am more respected now than I was before.*

5I (female): *Intonjane is more interesting than school. Even if you are not the one that is initiated, just staying there for the week with the other female learners is really nice.*

From the above responses, the following number of issues that reflects gender perceptions of learners emerged, and these are that female learners perceive initiation schools as their path towards womanhood and social recognition and prefer the initiation school to the formal school as they see the former as more relevant to them than the latter.

Moreover, the names given to female learners in the initiation school seem to motivate them to drop out of school.

5.7.4.4 Ritual 5: Finger cutting

Finger cutting, according to Manning (2010), is the practice of cutting off the female learner's finger which is done as a medical intervention when a girl (more so than boys) is seen as not well health-wise, and it is believed that cutting off of the forefinger will cure her. The only response elicited from the interview goes thus:

1A (female): *Mam look at my finger, how can I type the way that our teacher wants us to type when I have half a finger? (ingqithi). One boy told me he can see why they cut my finger and it's because I don't listen.*

From the response above, the following issues come to the fore, namely: that finger-cutting for the female learners limits the ability of the female learners to type on the keyboard and contributes to their poor performance.

Below is a discussion of the findings regarding schools as environments where factors that affect e-learning proficiency of female learners occur.

5.7.4.5 Schools

The following factors, as discussed in 5.5.2.5 above, have been shown by literature and practices which affect e-learning proficiency in female learners and they are discussed below. These are teachers; curriculum; peers and gender-based violence and harassment in schools; support for female learners.

5.7.4.5 (a) The teachers

According to Manning (2010), the manner in which the teachers interact with learners of different genders in schools affects academic success, particularly for female learners in schools that are situated within patriarchal societies. Lajoie and Derry's (2007) descriptions of the role of the teacher in an e-learning classroom, as underpinned by social constructivist principles, are that the teacher should be: an instructional designer, learning progression partner, advisor, team coordinator, and, lastly, a monitoring and assessment specialist.

The following are responses regarding how female learners in focus groups perceive their interaction with the e-learning teachers:

4G (female): Our teacher does not have time to help us catch up and always ask male learners to help us even though the male learners like shouting at us.

3E (female): Our teacher always tells us that maybe it's better if we don't come to his class because technology is not for female learners and we are not coping, and he is telling the truth.

1A (female): We are not allowed to go and ask the teacher for help after the e-learning class just in case we go to his office and accuse him of sexual harassment.

5I (female): There are very few female learners that are good with computers and those are the ones who are friends with male learners or shout back at the male learners and fight for computers.

On the other hand, male learners' experiences with the teacher reported below were different from those of female learners, as per their responses:

5J (male): Our teacher is funny and lets us explore with computers, especially on the days when female learners are absent.

6L (male): The teacher makes sure that we all understand and encourages us to ask questions.

2D (male): I feel sorry for the teacher when female learners are there, how can he teach so many of us nicely?

From the responses above regarding how male learners and female learners perceive their interaction with the e-learning teachers, it emerged that the female learners feel that the e-learning teachers: favour male learners over female learners; discourage female learners from attending the e-learning class; and assume that the female learners are receiving support from their peers (male learners appointed to assist), whereas female learners are being verbally abused by male learners.

Male learners feel that the e-learning teachers give them very good feedback and are frustrated by the female learners because the latter slow down the learning pace and are not serious.

Below is discussion of the second factor that possibly affects e-learning proficiency of female learners, namely the curriculum.

5.7.4.5 (b) The curriculum

Heaton and Lawson's (2009) opinion is that within education various subjects are aimed at a certain gender group. They support this opinion by saying that, for example, in most schools cooking is aimed at female learners doing housework and cooking, and that, while most schools currently title this course, *Food Technology*, feminists believe that this subject is still designed to 'trap'

female learners into adopting a manner of behaviour that a patriarchal society can accept.

Responses from the learners regarding their experiences on the issue of *curriculum* were mostly on the issue of career choices, and these are as follows:

4H (male): *there is school support given for career guidance for both male learners and female learners, but female learners always chat and don't listen, so how are they going to know about good careers?*

3E (male): *I think female learners are much better at those courses that need softness...I mean maybe social work so they should not come and do technology because they won't need computers to work as social workers, all they do is to listen to people's problems and make those people happy qha [that's all]*

2C (female): *my parents think it would be good if I took subjects to help me to become a nurse or a teacher and not try to get into manly careers.*

The responses above regarding the issue of curriculum show the following gender perceptions: some parents believe that their children should follow traditional gender-based careers, and female learners are expected to follow 'soft' careers, regardless of whether they go for career counselling or not.

Below, is the discussion of another factor that possibly affects the e-learning proficiency of female learners, namely gender-based violence and harassment in schools.

5.7.4.5 (c) Gender-based violence and harassment in schools

According to Mabovula (2010), gender-based harassment, which can include a range of behaviours, is based on the presumption of power relations which discriminate against female learners and females.

The following are responses from various female focus group interviews regarding gender-based violence and harassment in the school and e-learning classroom:

1A (female): *We are not allowed to approach the teacher once he goes to his office for our own protection. He says just because we might accuse him of sexual harassment.*

3E (female): *I am uncomfortable in the e-learning classroom because (smiling and looking away)...the male learners sit too close and sort of rub against us uncomfortably.*

2C (female): *...and it's like they will think uyaziphakamisa [you are conceited] when you move or tell him not to sit too close.*

4F (female): *Worse ke mam, they won't help you when you get stuck with computers coz they say uyazidla (stuck-up). They shout and say ndizokuxelela kangaphi uze ude uyazi le nto? (How many times must I explain the same thing to you?)*

5H (female): *Aworse amakrwala ukuba rude Mam! [male initiates are much more rude than the other male learners in the e-learning class]...and our teacher just watches them take the best computers because she is not allowed to cane them since they are now amadoda [men]. And they also like to take a chance to get a girl to take out izothe [the initiates sleeping with many female learners in order to cleanse their sperm], so they say if you need their help in the e-learning, you have to promise to sleep with him.*

From the above responses of the female learners, the following gender perceptions emerged: in the e-learning classroom female learners experience verbal abuse in the hands of male learners, and there are recurring instances of sexual harassment and discrimination against female learners from male learners.

Below, the discussion proceeds to the last factor that possibly affects e-learning proficiency of female learners, namely lack of support.

5.7.4.6 Lack of support of female learners in the e-learning classroom

According to Solomon (2009) a wide variety of factors contribute to the success of e-learning generally, and access is one of the integral support systems.

The responses below are from both female learners' and male learners' interview groups where they shared their experiences of gender in the e-learning classroom.

2D (male): There are very few computers, and I think since female learners are not interested in technology; they must not come to the e-learning class.

3E (female): Our teachers are stressed with many of us and very few computers.

5J (male): Many computers in the lab do not work.

6K (female): The time table limits the time we spend with computers.

4G (female): The male learners are allowed more into the lab than us.

1A (male): We are more in the lab for cleaning it than for using the computers.

The responses from the focus groups regarding access to computers show the following: there is very limited access to the computer laboratories due to the high numbers of learners; even when there is access, there is a limited number of functioning computers; and female learners report lesser access to the computers than male learners.

The section below reports on findings of the questionnaires. It should be noted that just like the focus group interviews above, questionnaires were also used for triangulation purposes, and only findings of the very relevant emerging themes are discussed.

5.8 Quantitative data findings

Discussion of the quantitative data findings followed a similar format as the qualitative data findings discussion. This was done through following selected themes and subthemes found in the qualitative data findings. This study is QUALI-quantitative (Creswell, 2011), as explained in the methodology chapter. This therefore means that quantitative data findings are limited because questionnaires were used mostly for purposes of data triangulation (Mouton,

2010). It should also be noted that a few findings that are discussed in this section only correlate to the focus group themes and not to the teachers' interview themes. This is because the concerned data could be obtained only from the learners rather than the teachers.

5.8.1 Gender based stereotypes within the context of technology

Various researchers such as Wainana (2008), Mlitwa and Koranteng (2013), and Dlodlo (2010) have reported findings on research regarding on how gender stereotypes play a role in socializing individuals regarding male dominated subjects and fields such as Technology, Maths and Science.

In the questionnaire, questions that sought to elicit data on gender-based stereotypes within the context of technology were E1, E2, D4 and D5. E1 sought responses regarding whether the students perceived male learners or female learners to be better in technology generally through a close-ended YES/NO question; E2 was an open-ended follow-up question that required learners to explain their responses to E1; D4 and D5 were close-ended questions that required the learners to respond whether both genders verbally communicated their gender perceptions regarding technology abilities openly in the e-learning classroom.

Table 5.2: Female and male learners' close-ended responses regarding their gender perceptions on technology

Questionnaire Item	Question	Response	Code	Males	Females
E1	Do you think male learners and female learners have similar abilities to excel in computers?	Yes	1	15%	23%
		No	2	81%	59%

According to table 5.2 above, 81% (41) of the male learners responded that male learners and female learners do not have similar abilities to excel in computers. A smaller percentage of 59% (41) of the females supported the view that male learners are naturally better than male learners in computers. What the above statistics imply is that, in addition to male learners, most female

learners also perceive male learners as having better abilities than female learners in excelling in technology.

Questionnaire item E1 was followed up with an open ended question (E2) that required the learners to explain their responses on (E1) regarding their gender perception on technology. Responses in table 5.3 below show **open-ended** response explanations from both male learners and female learners with regards to their gender perceptions of abilities in technology.

Table 5.3: Female and male learners’ follow-up open-ended responses regarding perceptions on technology

Questionnaire item	Question	Common response categories from male learners	Common response categories from female learners
E2	Please explain your response to E1 above	<ul style="list-style-type: none"> - <i>Female learners are lazy to practice computers</i> - <i>Male learners are always exploring with technology</i> - <i>Female learners are just not made to cope with technology</i> 	<ul style="list-style-type: none"> - <i>Male learners are always exploring with technology</i> - <i>Male learners own gadgets more than female learners</i> - <i>No time for computers</i> - <i>female learners are not created to like technology</i>

In question E2, which is the **open-ended** follow-up question that required the respondents to support their responses in E1, most common responses from male respondents were that *males have better abilities to excel in computers than female learners* because *female learners are “lazy to practice” computers* and *male learners are always exploring using technology*.

Female learners’ explanations in question E2, on the other hand, slightly differed from those of the male learners. In E2, the most common responses from female learners were that *female learners are created not to like technology* that *they do not have time for technology*, and *that male learners have an added*

advantage on technology since they mostly own technology gadgets more than female learners.

From table 5.3 above, both male learners and female learners perceive male learners as better at computers than female learners. On the other hand, it can be noted that male learners and female learners differ in their explanations of the causes of the differences in abilities in technology skills between male learners and female learners. According to the male learners, the reasons for female learners to lag behind male learners in the e-learning class are that female learners do not put effort into improving their technology skills and are 'lazy'; male learners have inborn abilities to excel in computers, and, lastly, male learners use technology for exploring more than female learners, and therefore sharpen their skills in technology.

However, female learners explain the reasons for their lack of technology skills as that they are always busy with household tasks and have no time to spend developing their computer skills, which the male learners seem to have. In addition, female learners perceive technology skills to be inborn, and they seem to be of the opinion that male learners have an added advantage since they have this inborn skill to excel in technology. Questionnaire item D4 and D5 sought to find **comments** that both male learners and female learners make in the e-learning classroom regarding technology abilities of both genders. Responses in table 5.4 below show responses regarding comments made by both genders with regards to technology abilities of both genders.

Table 5.4: Learners' responses to comments technology abilities of the opposite genders made in the e-learning class

Questionnaire item	Question	Response choices				
		1	2	3	4	5
	In the e-learning classroom:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
D4	Female learners sometimes make comments that point to male learners being better at computers than female learners	0%	26%	4%	29%	31%
D5	Male learners sometimes make comments that point to male learners being better at computers than female learners	0%	0%	10%	26%	64%

Responses from female learners in table 5.4 above show that both male learners and female learners perceive and actually articulate the point that male learners are more able than female learners to perform well in computer-based learning. According to 60% (45) of the responses, female learners do comment in the e-learning class that the male learners are better in computers than female learners. On the other hand, the majority of the responses, which is 90%, (62) agree that male learners do make their perceptions that they are better in computers well-known in the e-learning classroom. Therefore, from the discussion above, it seems that both male learners and female learners do not make a secret of their gender perceptions regarding which gender is likely to excel in the e-learning classroom. The next agent of socialization, namely, the family, is discussed below.

5.8.2 Family as an agent of socialization

According to the Changing Tapestry Report (2006), the most important agent of socialization is the family since it is the first point of contact for every individual and therefore very influential. The responses below show the extent of the parents' influence with regards to technology-based educational choices of the learners. In the questionnaire, questionnaire item E3 sourced **close-ended** responses that indicated whether families encouraged or discouraged learners of different genders from using computers for learning. In addition, questionnaire item E4 sourced **open-ended** responses wherein learners explained career aspirations that their parents had for them. Table 5.5 below shows learners' responses to questionnaire item E3 per gender.

Table 5.5: Family encouragement to use computers for learning

Questionnaire Item	Question	Response	Code	Males	Females
E3	Does your family encourage you to use computers for learning	Yes	1	98%	66%
		No	2	1%	30%

Table 5.5 above shows that 98% (49) of the male learners responded that they are encouraged by their families to use computers for learning. However, a

lesser percentage of 66% (46) of the female learners responded that they are encouraged by their parents to use computers for learning and possibly even pursue a career in IT, whilst 33% (23) of the female learners responded that they are not encouraged by their parents to use computers for learning. Questionnaire item E3 was followed up with an **open ended question** (E4) that required the learners to explain their responses to E3. Responses in table 5.6 below show **open-ended** responses of female learners only because male learners did not respond to this follow up question. Most probably, the aforementioned minimal response could be because 98% (49) of the male learners are encouraged by their families to use computers for learning as per table 5.5 above. Table 5.6 below therefore reflects responses of female learners' responses only regarding the reasons that they were given by their parents when they were being discouraged to use computers for learning.

Table 5.6: Reasons provided by parents to learners for discouraging use of computers for learning

Questionnaire Item	Question	Common response categories from male learners	Common response categories from female learners
E4	If your answer to E3 above is “no”, what reason(s) are you given by your family for discouraging your use of computers for learning?	There were no responses for this follow up question from male learners.	<ul style="list-style-type: none"> - <i>technology will make female learners to know ‘too much’</i> - <i>Internet will make female learners to lose their sense of respect, especially for customs.</i> - <i>computers are for male learners only</i> - <i>can only use computers for learning more about career choices such as journalism, public relations management, social worker and teacher.</i> - <i>something to do with interacting and helping people</i>

According to female learners’ responses in table 5.6 above, their parents discourage them from using computers because these parents are of the opinion that: *computers are for male learners , female learners’ sense of respect will be affected negatively by the knowledge that they might get from the internet, and that female learners should only be exposed to very minimal information.* Some parents who encourage their daughters to use computers do so mainly so that the *female learners may source career information that will guide them towards traditionally female careers.*

From the responses on family encouragement on use of computers, some gender perceptions came to the fore. These are that parents encourage male

learners more than female learners to venture into technology-based learning and still perceive traditionally male careers such as Information Technology as not suitable for their daughters.

The discussion below proceeds to schools as venues where gender perceptions that possibly affect female learners' e-learning proficiency occur.

5.8.3 Schools

According to Delamont (2009), various elements in the schools are actively responsible for perpetuating and reinforcing the behavioural differences between males and females through gender perceptions. The factors that possibly affect e-learning proficiency of female learners are discussed under the quantitative data findings are the teachers and peers.

5.8.3.1 Overall factors affecting female learners in the e-learning classroom

It was important for this study to establish relations between teachers and learners in order to determine the factors that affect girls' lack of proficiency in e-learning. In addition, it was important to determine the extent to which female learners are supported in the e-learning class by both their teachers and peers. According to Mabovula (2004), a positive relationship between teachers and learners is one of the most fundamental principles of educational psychology which determines the success of learners.

In the questionnaire, questions D1-D7 were asked in order to establish the manner in which teachers interacted with learners of different genders in the e-learning classroom and the support provided by both teachers and peers. Responses from male students to this section were very poor, with only an 8% (4) response rate. The male learners' responses for this section have, therefore, not been discussed since the 8% (4) response rate is not representative of the total number of male learners that participated in the study. Table 5.7 below contains responses of the female learners regarding their relations with their teachers in the e-learning classroom.

Table 5.7: Female learners' responses to how they interact and gain support from the e-learning teacher and peers

In the e-learning classroom:		1	2	3	4	5
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
D1	The teacher provides equal access to computers for both male learners and female learners	93%	05%	01%	0%	0%
D2	There is support given by the teacher to all students equally, that is to male learners and to female learners	89%	7%	4%	0%	0%
D3	The teacher sometimes makes comments that point to male learners being better at computers (or technical subjects) than female learners	0%	4%	6%	11%	79%
D4	Both male learners and female learners are cooperative during the computer class	41%	38%	10%	11%	0%
D5	I am comfortable to ask for assistance from the teacher at any given time	69%	24%	4%	2%	0%
D6	The teacher gives good feedback such as praise when I do well	67%	28%	1%	4%	0%
D7	The teacher makes us aware of the benefits of having computer skills	59%	34%	2%	3%	0%

From table 5.7 above, female learners' responses with regards to how the e-learning teachers interact with learners of different gender show that 93% (64) disagree that the teacher provides equal access to computers for male learners and female learners. Further responses show that 89% (61) (strongly disagree plus disagree) disagree that there is support given by the teacher to all students equally, that is to male learners and to female learners; 90% (62) (strongly agree plus agree) of the responses show that the teacher sometimes makes comments that point to male learners being better at computers (or technical subjects) than female learners. In all, the above responses show that the e-learning teachers favour male learners over female learners.

With regards to peer assistance, the majority which is 79% (55) (strongly disagree plus disagree) of the female learners disagreed that there is peer support, and 11% (8) agreed that there was collaboration between female learners and male learners in the e-learning classroom. Additionally, 93% (64)

(strongly disagree plus disagree) of the female learners disagreed that they are comfortable to ask for assistance from the teacher at any given time, whilst 95% (66) (strongly disagree plus disagree) disagreed that the teacher gives good feedback such as praise when they do well in class. The above responses point to lack of support for female learners from their e-learning teacher.

Moreover, the responses above on learners' interaction with their teachers show evidence of existence of gender perceptions, namely that the majority of female learners do not enjoy e-learning classes, are not provided advice and support regarding the merits of computers by the teachers, are treated differently by the teachers in favour of the male learners, and do not receive support from their peers. The issue of peer support is discussed in greater detail in the section below as this is fundamental in a socio-constructivist classroom.

5.8.3.2 Peer support in the e-learning classroom

In a socio-constructivist classroom, such as an e-learning classroom, Vygotsky cited in Muhuro (2009) insists that success rests on collaboration where the 'knowledgeable other' such as the peer assists other learners to develop their own set of knowledge and skills. In the questionnaires, questionnaire item E8 sought to elicit data regarding specifically how much assistance female learners received from their 'knowledgeable other' peers, which are the male learners. Diagram 5.1 below shows the female learners' responses to questionnaire item E8 in order to corroborate the responses in item D4 above, which posed a similar question but worded differently, as per Denscombe's (2007) guide.

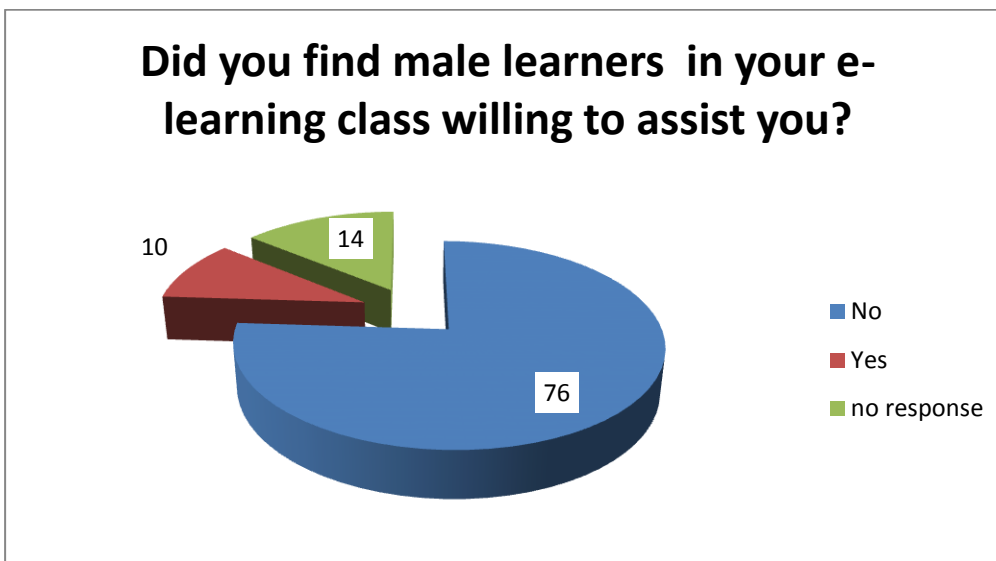


Diagram 5.1: Willingness of male learners to assist in the e-learning classroom

From diagram 5.1 above, the majority of the female learners, which is 76% (52) found male learners unhelpful, and 10% (7) found male learners helpful. The female learners indicated in the open-ended follow up response that they did not like the impatient and shouting manner in which they received this assistance. Ryba (2004) asserts that research on gender reveals that female learners prefer collaboration to competition, and that the tasks that they are involved in are more meaningful to them when shared in a peaceful manner. Maurer and Davidson (2009) maintain that this is especially beneficial in the e-learning classroom when the students that assist others have been trained in the social aspects of helping other learners.

In the responses above on the willingness of male learners to assist female learners in the e-learning classroom, the following gender perceptions came to the fore:

The majority of the female learners in the e-learning classroom perceive male learners as unhelpful and verbally abusive when in actual fact, the male learners are meant to assist them as per the teachers' directives.

The next section discusses the extent to which the learners had access to computers in the e-learning classroom by gender. Access to computers was posed as a specific question to learners to corroborate some of the responses

that responded to the issue of support afforded/not afforded learners of different genders by teachers in question D1 above.

5.8.3.3 Use of and access to computers

The researcher posed the question of computer access in both the focus group interviews and the questionnaires. Stotelkamp and Kies (2007) explain the success of e-learning in the Western Cape as based on the maximum access of computers for all learners who are keen to engage in e-learning. What Stotelkamp and Kies' (2007) statement implies is that if any e-learning venture is to be successful, all learners should have equal access to the e-learning resources. Table 5.8 below shows computer access for both male learners and female learners in all the six schools.

Table 5.8: Computer access for learners (N=119)

Gender	How often per week did you use the computer?			Total N=119
	2 times	More than 2 times	Less than 2 times	
Female	9 (13%)	9 (13%)	51 (74%)	69
Male	12 (24%)	28 (56%)	10 (20%)	50
Total	27 (23%)	37 (31%)	61 (51%)	119

From table 5.8 above, it is clear that both male learners and female learners have limited access to the computers. In fact, from the cross-tabulation above it seems that the male learners have more computer access than the female learners. This is shown by the fact that 80% (40) of the male learners have two or more weekly sessions to access the computer whilst only 26% (18) of the female learners have access to the computers two or more times per week. The majority of the female learners, which is 51% (36) access the computers less than twice a week.

From the responses on computer access for female learners and male learners above, the following gender perceptions emerged: both male learners and

female learners have limited access to computers, but female learners have even less access to computers than male learners.

Below is the discussion on the factors that the students perceive might have negatively affected their performance in the e-learning classroom. The responses below touch on the curriculum, which was discussed in chapter 3 as one of the factors that possibly affect e-learning proficiency of female learners.

5.8.3.4 Factors contributing to learners scoring less than 50% in e-learning

Questions in this section sought to elicit data that would shed light on whether the students' final score was below or above 50%, and issues that they perceive as having contributed to their score.

*It must be noted that the researcher had access to the students' performance through the project evaluation done by Walter Sisulu University (Appendix D), which was the project funder as mentioned in Chapter 1. Moreover, although the questionnaire was anonymously filled in, the researcher coded the response sheets from 1 to 119 and the learner's names as per the attendance register. Furthermore, the researcher entered the marks of each one of the participants next to their coded number so that she was aware of their performance in the e-learning project.

The researcher was able to detect, by going through the evaluation report, if the student was telling the truth or not about their performance in the e-learning classroom. As stated in Chapter 4, the learners were assessed at the beginning and the end of the one year project on basic computer skills such as typing, using a mouse, saving files and internet surfing. In addition, since the software used in the project was on English language learning, the pre- and post-assessment was on basic comprehension and grammar skills. Therefore, this is the score that the researcher is referring to.

The reason for the researcher to ask this question was motivated by Bloom (1969) who asserts that the basis of all assessment lies in critical reflection of the learners' performance. This means that learners need to be able to reflect on their performance and be able to pinpoint their shortfalls for improved performance in future.

Table 5.9: Male learners' perceptions of factors that contributed to them scoring less than 50% in e-learning assessments

Gender	Factors that caused you to score less than 50% in e-learning classroom			Total N=50
	English skills	Computer skills	No response	
Male only Total	9 (18%)	18 (36%)	23 (46%)	50

The responses shown point to the curriculum being one of the factors that contribute to lack of e-learning proficiency, in this case, e-learning curriculum is a combination of computer skills and English language curricula. Table 5.9 above shows that 18% (9) of the male students indicated that the English language used in the software was difficult, and they sometimes did not understand the instructions. A higher percentage of male learners, which is 36% (18) responded that they lacked computer skills to deal with the set tasks. Unfortunately, 46% (23) of the male learners did not respond to this question since the question only required responses from learners who had scored less than 50% in the final assessment of e-learning. From the responses above on factors that were perceived to have contributed to the learners scoring less than 50%, it, therefore, emerged that male learners mostly perceive limited access to computers as a contributing factor to scoring less than 50%.

Table 5.10: Female learners' perceptions of factors that contributed to them scoring less than 50% in e-learning assessment

Gender	Factors that caused you to score less than 50% in e-learning assessment				Total N=69
	English skills	Computer skills	Limited access	Lack of support	
All female Total	2(3%)	14(20%)	20(29%)	34(49%)	69

Responses from table 5.10 above show that a minority, which is 3% (2) of female learners believe that lack of English skills contributed to their poor performance. Additionally, 20% (14) of them attributed their poor performance to limited access to computers while 49% (34) attributed their poor performance to lack of support from teachers and peers. From table 5.10, what can, therefore, be deduced is that female learners mostly perceive lack of support and limited access to computers as contributing factors to scoring less than 50%.

5.9 Chapter Reflections

Chapter 5 presented the findings of this study as per the responses provided by all the participants. Five (5) teachers and one (1) District official were interviewed through an unstructured interview. The findings presentation followed the sequence of the *a priori themes* established for the unstructured in-depth (narrative) interview with the teachers.

One hundred and nineteen learners (119) were interviewed through focus group discussions and also filled in questionnaires. Findings from the learners collected from focus group interviews and questionnaires were used for triangulation purposes to assist the researcher to clarify some of the issues regarding factors that affect e-learning proficiency of female learners. These were e-learning teachers' favouritism of male learners over female learners, curriculum that is not responsive to learners' needs, lack of support for female learners, and lack of peer support for female learners.

In addition, an emerging focal point of Chapter 5 is that patriarchy plays a big role in the socialization and the establishment of gendered societies in which the six participating schools are located. In view of the main theoretical framework of this study, namely, critical theory, the findings of this study seem to show that there is an unequal social support in the schools based on gender as per Ralphe's (2011) assertion. The aforementioned inequality seems to be driven, according to findings in this chapter, through the process of social construction of gender in patriarchal societies which carries over to schools.

In addition, agents of socialization such as the home, religion, and culture seem to influence gender perceptions of the participants, which possibly influence the failure of female learners to achieve their full potential in learning through technology. This possibility is informed by interview responses that reveal that the participants are socialized through the agents of socialization in a manner that promotes male domination of females. According to critical theory perspectives of Silverman (2006), those who have power and status in society, who are males in this case, control the rest of the society, and by so doing unequal conditions can be maintained, as is the case in the e-learning classroom.

Critical theorist, Shor (2007), further argues that those who maintain the domineering *status quo* do so in order to maintain the social and power benefits, and do everything in their power in order to maintain this power. In this chapter, findings reveal that male teachers and male learners appear to relish their dominance of females through sexism and cultural perceptions, thus reducing the self-confidence of females and relegating females to private realms, whilst promoting males to public spheres. Such cultural perceptions which preserve the unquestioned status of males, according to the findings, seem to further promote gender stereotypes wherein females' abilities are trivialized and male potential is promoted, especially with regards to e-learning.

This power and control is, according to critical theorist Dewey (1938), wielded through a tool called *hegemony*. Dewey (1938) describes hegemony as a subtle tool that is used by agents of socialization in order to control the individuals in a given society. In the findings, there is consistent acknowledgement of this hegemony by both male and female participants wherein they indicate that they all live in a man's world, and female participants unquestioningly accept their inferior status and probable incompetence in the e-learning classroom.

Findings from this chapter are further discussed in Chapter 6 to form a synthesis of the data and literature reviewed in this study.

CHAPTER 6: DISCUSSION OF FINDINGS

6.1 Introduction

The previous chapter presented data regarding the e-learning experiences and gender perceptions of six (6) teachers and one hundred and nineteen (119) learners who participated in this study in order to determine factors that affect e-learning proficiency of female learners.

The main aim of the study was to determine the gender perceptions of the teachers who offer e-learning and how these perceptions and other factors are likely to influence e-learning proficiency of female learners (*cf.* 1.7). Gender perceptions and roles attributed to females by society and conveyed by the teachers to the schools, as well as the socialization of females, were important factors that were taken into consideration in this study. The afore-mentioned perceptions are important because according to critical theorists of pedagogy, what schools do, according to Mwingi (2008), is help create and re-create existing societal culture, beliefs, practices in terms of that society's perceptions and sometimes, stereotypes (*cf.* 2.2.1). Furthermore, according to Kincheloe and McLaren (2002), critical theory, wherein this study is grounded, clarifies gender perceptions research because it is based on determining power and justice of several issues in society such as economy, race, gender, and education.

Research was done by means of a literature study in Chapter 2 on gender, patriarchy and socialization and in Chapter 3 on gender, pedagogy and e-learning. This literature study shed light on grounding perspectives on gender and the impact that gender perspectives of teachers and learners, together with additional factors such as the curriculum, peer support and female learner support might have on female learners' success in e-learning (*cf.* 2.2). In Chapter 4, the qualitative in-depth methods applied to the selected respondents was discussed in an attempt to draw forth data that sheds light on the respondents' possible gender-role perceptions that are determined by their backgrounds and the societies that the schools are located in (*cf.* 4.7) and how these might affect the e-learning proficiency of female learners.

This study used narrative enquiry to elicit data from the interviews (*cf.* 4.3.1). The idea behind the use of narratives was to discover, as per Mabovula's (2010) assertion, the untold stories of educators and learners, or part of what is actually taking place in the e-learning classroom and the school generally with regards to gender perceptions and how these possibly affect the performance of female learners in the e-learning classroom. Moreover, focus group interviews and questionnaires were used to elicit data from students regarding their experiences of e-learning, gender stereotypes and factors that may affect the female learners' e-learning proficiency.

In this chapter, findings presented in Chapter 5 are discussed and referenced to the literature study. The aforementioned discussion is done through following similar themes and subthemes used in Chapter 5. In addition, the discussion is synthesized within this study's main research framework, namely the critical theory of pedagogy, with feminism and constructivism playing complementary roles.

6.2 Patriarchy

Findings on patriarchy are discussed below regarding patriarchy's influence on gender, exploitation and manipulation, discreditation and lack of support, oppression, gender discrimination, subordination, sexism and sexist behaviour, contamination, gender-based violence, misogyny, female disrespect, biological determinism, public and private realms, and gender role stereotypes .

6.2.1 Influence on gender

Most responses from both the teachers' and learners' interviews showed that patriarchy-driven traditional beliefs are responsible for gender perceptions in the schools (*cf.* 5.5.2.3.1, 2.4, 2.5.2.3.1). In the qualitative interviews with the teachers, all respondents indicated how patriarchy has impacted on their gender perceptions, particularly with regards to gender differentiation (*cf.* 5.4a, 2.4). The responses of the teachers appear to point to how they have accepted the aforementioned gender differentiation and how they apply it in the schools. Lope (2000) concurs with the above-mentioned findings by asserting that gender perceptions are influenced by the patriarchal nature of the environment where

the participants grew up. Critical theorist of pedagogy Marshall (2010) adds that such gender perceptions reveal the existence of power, hegemony, and patriarchy, and the hidden curriculum in schools (*cf.* 1.2).

Responses of the learners also seem to show how gender perceptions are manifested in the schools with respect to female learners' and male learners' behaviour towards one another (*cf.* 5.7.1, 2.5.2.5). According to the focus group responses of female learners, the influence of patriarchy on gender perceptions seems to affect the female learners wherein they responded that they were being perceived as inferior to male learners, were exposed to gender stereotypes, dominated, oppressed through harassment and violence, abused and discriminated against in the e-learning classroom (*cf.* 5.7, 2.5.2.5, 2.4). The latter concurs with literature where Lope (2000) contends that patriarchy is a social and ideological paradigm which views males (who are the patriarchs) as superior to females.

In terms of the role schools play in socializing its stakeholders, critical theorist Dewey (1938) argues that education assists to shape *hegemony* through the schooling system (*cf.* 1.2). The responses in the qualitative interviews whereby teachers indicated that patriarchy played a big role in their own background (*cf.* 5.4, 2.4, 2.2.1) attest to the aforementioned theory. Further corroboration with the critical theory of pedagogy emerged from the teachers who indicated that since the schools that they are teaching in exist within patriarchal societies, it seems, for them, to be a natural progression to apply similar patriarchal ideologies in their teaching (*cf.* 5.4, 2.4).

The above-mentioned responses were also substantiated by responses from the focus group interviews where the learners cite allocation of chores in the schools as evidence of gender differentiation encompassed in patriarchal societies (*cf.* 5.7, 2.5.2.5). All participants also reported that males are given leadership powers in patriarchal societies, and this was attributed to influence of culture and the legal fraternity (*cf.* 2.4, 5.7.4.1, 5.4). In support of the above findings, critical theorist of pedagogy Giroux (2008) asserts that most schools' 'view of reality' is at odds with that of many of the learners who come from the

minority classes or oppressed gender and who are consequently excluded (*cf.* 1.2).

Due to the schools being operated within patriarchal communities, both the female and male learners in the focus group interviews and the teachers reported that the manner in which teachers and male learners interact with the female learners constantly favours the male learners (*cf.* 5.4, 5.7.4.1, 2.4). Such differentiation seems indicative of the characteristic of a patriarchal society where the male is revered and considered superior to the female (*cf.* 2.4). Chacko (2003) adds that in African communities, such as the ones that this study is conducted in, patriarchy plays a major role in influencing people's gender perceptions, and these are acted out in all aspects of the community.

The manner in which the teachers are reported to be interacting with female learners in the schools seems to create an unsupportive environment for the female learners in the e-learning class (*cf.* 3.3.1, 5.5.2.5).

The responses on patriarchy's influence on gender seem to show that the patriarchal backgrounds of the teachers influence gender perceptions substantially (*cf.* 2.4, 5.5.2.5). The above influence appears to translate such perceptions into the schools, which, in turn, seems to affect female learners' performance in the e-learning classroom and schooling in general (*cf.* 2.4, 5.5.2.5). In support of the afore-mentioned, Ralphe (2011) argues that those who uphold the *status quo* (in this case, males in the patriarchal societies) do so in order to preserve the social and power benefits to the detriment of the oppressed, which in this study are the female learners (*cf.* 1.2, 2.2.1).

6.2.2 Exploitation and manipulation

The responses below from female teachers and learners seem to indicate that they have experienced and accepted the exploitative *status quo* (*cf.* 2.4, 5.5.2.5, 5.7). The teachers' and learners' responses seem to demonstrate that such exploitation occurs as a result of years of brainwashing in the patriarchal societies that they are all socialized in (*cf.* 5.7.4.1, 2.4, 2.5). This concurs with literature which indicates that in patriarchal societies, according to Wainana

(2008), females are exploited by several means where culture is used to 'brainwash' them to believe that male domination is a given.

Most teachers' and learners' responses indicate that manipulation of females is justified through cultural practices and promotes subordination of females (*cf.* 5.4b, 5.7, 2.4, 2.5.2.3). In cases where culture is used to justify exploitation of females, Wainana (2008) explains that various rituals that may be considered abusive to females are acknowledged as a norm and never interrogated by such patriarchal societies because the rituals are predominantly for the benefit of males (*cf.* 2.5.2.3).

Most male learners' responses in the focus group interviews seemed to indicate that female exploitation and manipulation are perceived as their right and are done primarily for the pleasure and entertainment of males (*cf.* 5.7.4.1, 2.4). Silverman (2006) adds that skilling of the oppressed should be viewed in the context of the political, ideological and cultural assumptions of the society that has given rise to it (*cf.* 1.2).

6.2.3 Discreditation and lack of support

All female participants reported experiences of discreditation and lack of support and unfair gender role expectations (*cf.* 5.4c, 5.7, 2.4). The afore-mentioned discreditation is at loggerheads with critical theory of pedagogy which views skilling through technology as a means of production (*cf.* 2.2.1, 1.2a). The teacher interviews also revealed that female teachers were not supported by their male colleagues and were sometimes subjected to disrespectful treatment (*cf.* 5.4b, 5.5.2.5a, 2.4.2). In the focus group interviews, female learners cited being used more as cleaners of the e-learning classroom than being allowed access to the computers (*cf.* 5.7.4.1, 2.4.2).

Furthermore, the discreditation of female learners was reflected from the male learners' focus group responses which indicated how they resent female learners' participation in the e-learning class and how they view female learners as *slowing down* the pace of learning in the class (*cf.* 5.7.4.1, 2.4). Critical theory perspectives, according to Ralphe (2011), point out that those who have power and status in society, who are male learners in this case, thrive on

maintained unequal statuses; therefore, in terms of the above responses, it appears that the male learners discredit the female learners in a manner that makes the male learners feel superior to the female learners (*cf.* 1.2, 2.2.1). The responses below on discreditation also support the critical theory perspectives mentioned above.

Interview responses from male teachers showed evidence of female discreditation in the manner in which male teachers perceive females as useless and inferior, thus discrediting their intelligence (*cf.* 5.4c, 2.4c). In the same vein, responses from some female teachers show that even the female teachers discredit the female learners through their perceptions of abilities of females (*cf.* 5.4c, 2.4c, 2.5.2.5a). As a result of these discreditations, responses from the female focus groups show that the female learners feel belittled and viewed as people of limited intelligence by the male learners and the teachers (*cf.* 5.7.4.1, 2.4, 1.2a). Mabovula's (2010) argument supports the findings, saying that in most patriarchal societies females' abilities are trivialized, and females are discredited and only acknowledged for their child-bearing activities.

Discreditation and devaluation of female learners was also reflected in responses from both the learners and the teachers where the phrase '*female learners are useless in the e-learning class*' were expressed by male learners and the teachers (*cf.* 5.4 c, 2.4, 5.7, 1.2). In addition, the teachers' and male learners' perception in the interviews that female learners '*use the e-learning class as a waiting room for marriage*' seems to constantly portray female learners as weak and only capable when they have a man at their side (*cf.* 2.3g, 1.2, 5.4, 5.7, 2.2.1), which is heavily criticized by radical feminism (Manning, 2010). Discrediting was also reported by female learners' responses in section E of the questionnaire as one of the major reasons for them losing interest in the e-learning class (*cf.* table 5.5, 2.5.2.5). Lack of support for female learners in any technology venture has been cited in literature as a sure recipe for female learners to develop a negative attitude towards technology (*cf.* 2.5.2.5a, 2.5.2.5b).

Female learners' responses in focus group discussions indicated that lack of support from their parents, male peers and teachers resulted in them being

unmotivated to attend e-learning classes since they felt that they did not belong in the e-learning classes (cf. 5.7.4.1, table 5.6). Critical theorist Silverman (2006) asserts that people's class and social positions are perpetuated by the kind of education they receive. The lack of support for female learners is verified by responses from questionnaires where 33% of the female learners (as against 2% of the male learners) responded that they are not encouraged by their parents to use computers for learning (cf. table 5.6). The cited reasons by learners were that their parents felt that: *computers are for male learners, female learners' sense of respect will be affected negatively by the knowledge that they might get from the internet, and that female learners should only be exposed to very minimal information* (cf. table 5.7, 2.4, 2.4.2, 1.2a).

In addition, responses from the questionnaires indicate that some parents who encourage their daughters to use computers do so mainly for the daughters to source career information that will guide them towards traditionally female careers (cf. table 5.7, 2.5.2.1, 1.2b). Findings regarding lack of support for female learners to use technology are corroborated in literature by Mutekwel and Modibal (2012) who assert that in some societies, teachers and parents still perceive traditionally male subjects such as Mathematics, Science and Technology as not suitable for their female learners and, as a result, make female learners who take those subjects feel not welcome (cf. 2.5.2.5 a, 1.2a). Such gender perceptions are reflected in the questionnaire responses where the female learners' report that the e-learning teachers do not provide equal access to computers for male learners and female learners, and that the e-learning teachers do not give support to all students equally, that is to male learners and to female learners (cf. table 5.8, 3.3, 1.2a).

With regards to peer support, responses from both male learners and female learners in the questionnaires and focus group discussions agreed that female learners, who are mostly behind in their e-learning class, are not provided with support by their male peers who seem to be proficient in e-learning (cf. 5.8, 2.5.2.5, 5.7). The afore-mentioned lack of support is justified by gender perceptions of male learners that *female learners are lazy* and that *female learners are not naturally created to excel in technology* (cf. table 5.4, 2.5.2.5, 2.5.2.5a). Kincheloe and McLaren (2002) argue from a critical theory

perspective that such perceptions allow female learners to reflect socially on their conditions so as to overcome some of the limits that are imposed on them through their societies and choose critical consciousness over reproduction of inequality. Gender differentiation is seen to be the cause of the gender perceptions, according to Nkwinjeh and Mawarire (2007) who assert that the promotion of male superiority in patriarchal societies carries over to schools and breeds stereotypical gender perceptions that male learners are naturally better in traditionally male subjects than female learners (*cf.* 2.5.2.5a).

6.2.4 Oppression

Female participants, both in the interviews with teachers and the focus groups, responded that oppression from society as a whole limits their ability to express themselves (*cf.* 5.4d, 5.7, 2.4d). Participants in both the teachers' and learners' interviews also reported how oppressive behaviour manifests itself through indoctrination and violent behaviour directed at females by males (*cf.* 5.4d, 5.7, 2.4d). Such indoctrination is mentioned by Walby (1990) who explains that in the case of female oppression in patriarchal societies there is a system of oppressive supremacy associations which are hierarchical and unequal where males dominate through control of females' production, reproduction and sexuality (*cf.* 2.4). Silverman (2006) adds that such indoctrination is viewed by critical theorists as disabling to the oppressed, which in this case are the female students.

Critical theorists such as Shor (2007) validate the above findings regarding oppression by stating that the dominant groups in society, which according to the findings are male, come together to form codes that will help them to sustain control and leadership over the oppressed group, namely the females (*cf.* 2.21). Interview responses from female teachers further show that both female learners and the female teachers who have daughters live in constant fear of oppressive treatment from males (*cf.* 5.4d, 2.4d). In addition, the oppressive behaviour towards females is articulated through responses from the male teachers (*cf.* 5.4d) and male learners (*cf.* 5.7.4.1, 2.4d) who perceive female oppression as culturally determined and their right.

Literature regarding abuse of culture to perpetuate female oppression validates the above findings where Gobodo-Madikizela (2009) argues that patriarchy imposes masculinity and femininity character stereotypes in societies which strengthen the oppression of females by males. (*cf.* 2.4). As a result of such oppression, rituals such as forced marriages, finger cutting, and genital mutilation (*cf.* 5.5.2.3.2b, d, e, 5.7.4.4, 2.5.2.3.1, 2.5.2.3.2, 2.5.2.3.3, 2.5.2.3.4) demonstrate that there exist perceptions that female oppression and dominance are the right of males due to encouragement by the patriarchal societies and families.

From the focus group discussions, responses also show that male dominance and oppression affects female learners in the e-learning classroom negatively through bullying and sexism (*cf.* 5.4g, 5.5.2.5, 2.5.2.5c).

6.2.5 Gender discrimination

In both the female teachers' and learners' interview responses, participants indicated that they experience discrimination as females (*cf.* 5.4e, 5.7, 1.2a). Moreover, questionnaire responses from both male learners and female learners (*cf.* table 5.8, 2.4e) show that discrimination is acted out in schools and affects female learners in the e-learning classroom. Ray (2011) explains such discrimination against females as unequal treatment in terms of basic right to food, health care, education, employment, control over productive resources, decision-making and livelihoods, not because of their biological differences or sex, which is natural, but because of their gender differences, is a social construct. To concur with Ray's (2011) assertion above, critical theory of pedagogy questions, according to Ralphe (2011), such discriminatory acts in school environments wherein the above findings seem to establish that there exist anomalies and imbalances in e-education that favour male learners in the participating schools (*cf.* 2.2.1, 1.2, 3.3).

In this study, however, the discrimination against female learners surprisingly emanates from both male and female teachers, according to responses of both teachers and learners from the interviews and questionnaires (*cf.* 5.7.4.2, table 5.4, table 5.8). As a result of such discrimination, female learners' responses illustrate that in the e-learning classroom, they are unequally treated in terms of:

their basic right to education, limiting of their capabilities, and limited access to resources from both teachers and male learners (*cf.* 5.7.4.2, table 5.4, table 5.8, diagram 5.1, 2.4e).

6.2.6 Subordination

Responses from both male and female respondents in the interviews and questionnaires show that male dominance manifests itself in the schools through gender perceptions that pinpoint females as inferior to males (*cf.* 5.4f, 5.7.4.2, table 5.4, 2.4f). Subordination in the schools is reported by all participants to be as a result of the patriarchal society that the teachers and the learners come from (*cf.* 1.2a, 1.2b, 2.4). For example, in the questionnaires, 66% of the female learners report that their parents' gender perceptions against use of computers stems from fear that the female learners will cease to respect (males) and thereby lose their culture (*cf.* table 5.6, table 5.7, 2.5.2.1, 2.5.2.3).

Ray (2011) supports the above-mentioned findings by arguing that female domination and subordination is patriarchal in nature and is entrenched and legalized by numerous ideologies, societal practices, and establishments such as: family, religion, education, media, law, state and society. Interview responses from both female and male teachers further show how this subordination is entrenched in their perceptions that female learners should serve male learners through mundane tasks such as fetching water for the class and ensuring that they sweep the class way before the e-learning class commences so as to protect the manhood of male learners (*cf.* 5.4f, 1.2a, b, c, 1.3, 2.5.2.3).

The above-mentioned entrenched ideologies seem to perpetuate female learners' domination by males as per the female learners' responses in the focus group interviews (*cf.* 5.7, 2.4f, 2.4g). Literature substantiated the above findings where Manning (2010) argues that patriarchal ideologies, according to radical feminism, create female domination by males in all spheres of their lives such as schools, churches and homes in patriarchal societies. Both female learners and teachers in the interviews show how such subordination strips them of their power by being dominated through use of violence such as forced marriages and other rituals which result in female learners dropping out of the e-

learning classroom (cf. 5.4f, 5.7.4.3, 5.5.2.3.2f, 2.4, 2.4g). According to critical theorist Foucault (2006), stakeholders pursue and abuse power and policy within schools and societies in pursuit of strengthening oppression.

6.2.7 Sexism and sexist behaviour

All female respondents reported being exposed to sexism and sexist behaviour (cf. 5.7, 5.5.2.5a, 2.4g, 2.4k, 2.4). The above responses seemed to reflect the female teachers' acceptance of sexism as influential in how they perceive gender (cf. 5.4g, 5.7.4.3, 2.4).

In addition, responses from the male participants in both interviews and focus groups show that they perceive sexism as justifiable and behave in a sexist manner towards females through verbal abuse, violence and negative comments (cf. 5.4g, 5.7.4.3, 2.4, 2.5.2.5c). Some sexist male teachers and male learners' comments in the interviews included that *female learners act stupid in the computer room to avoid looking clever in case they miss out on an opportunity for marriage* (cf. 5.5.4.5a, 5.7.4.3, 2.4.3, 2.5.2.5c). Such sexism is explained by Zak (1997) as behaviour that is manifested through gender stereotypical utterances, disrespect and violence towards females.

In addition, some responses from male teachers show that males view the anatomical characteristics of females as the reason for their sexist perceptions towards females (cf. 5.4.1, 5.4g, 2.4g), and this is a contentious issue with feminist approaches, according to Ralphe (2011). Responses from male teachers and male students seem to indicate that sexism is prevalent in their societies, spreads to the schools and seems to affect female learners' performance in e-learning through discriminatory practices that the female learners are subjected to (cf. 5.7, 2.4g). Papallia (2003) corroborates the findings and maintains that sexism is mostly characterized by discrimination or prejudice based on a person's gender and involves discrimination against females.

The afore-mentioned sexist gender perceptions are also reflected in the questionnaire responses and male teachers' interviews where female learners' lack of proficiency in computers is perceived by male teachers and male

learners to be caused by the *female learners' laziness* (cf. 5.4 g, table 5.4, table 5.5). Furthermore, according to some male participants (teachers and learners), females are perceived as responsible for the sexist behaviour that is directed towards them by males (cf. 5.5.2.5a, 5.7.4.5a, 2.4g). Gobodo-Madikizela (2009) explains the perception that in most cases perpetrators of sexism and violence do not want to take responsibility for their actions and mostly blame the victims.

Therefore, some sexist comments from both the focus group interviews with male learners and teachers seemed to justify violence and abuse towards female learners (cf. 5.5.2.5a, 5.7.4.5a, 5.5.2.5c, 2.4, 2.5.2.5). The above responses are backed by literature which points out that patriarchal societies are riddled with sexism which is instilled in males from a very young age and is justified through culture and hegemony (cf. 1.2b, 2.4g, 2.21).

In fact, critical theorists Shor (2007) states that hegemony is *hegemony* because of its '*invisibility*'; it appears to simply be 'living and doing things the way they should be done' and seems to be a natural way of existence for many communities, which seems to be the case in this study. Additionally, sexist attitudes, such as those reported in this study, seem to be carried over from the communities to the schools to the e-learning classroom, with the result that female learners are not motivated to attend the e-learning class and, as a result, drop out (cf. 1.2b, 2.4g, 2.21). These sexist attitudes corroborate Ralphe's (2011) argument that there is a prevalence of injustice in the education sector, especially in patriarchal societies.

6.2.8 Contamination

Most female participants reported certain gender perceptions with regard to the issue of contamination and how this affects them (cf. 2.4h, 5.4h, 5.7). According to responses in both the interviews and the focus group discussions with female participants, most gender perceptions on contamination are fuelled by cultural beliefs (cf. 2.4h, 2.5.2.3, 5.4h, 5.7.4.3, 5.7.4.4). Bam (2009) validates these findings and states that in the Xhosa tradition, one of the main lessons taught to males, especially during initiation, is never to sleep with a female who is menstruating as this will weaken them.

Teachers and learners of both genders reported how such contamination issues become transposed into the schools and affect the way in which opposite genders relate to each other (*cf.* 5.7, 2.5.2.5). An example of such transposed contamination, as provided by the female teachers, is that traditionally a woman is considered 'dirty' when menstruating and is thus not allowed near a man lest his manhood be weakened (*cf.* 5.5.2.5a, 5.5.2.3.1, 2.5.2.3). Critical theory literature resonates with the contamination issue wherein Olga (1994) unpacks the contamination perception by males (*cf.* 2.4). Olga (1994) explains that there exists a *female contagion theory* where males believe that being around females and interacting equally with them is likely to turn males into *sissies* (a man who is soft), and they will lose the power that they have over females.

In the six schools, the *female contagion theory* is validated by some teachers' and learners' interview responses that male learners in the e-learning classroom refuse to share computers with any girl that they suspect to be menstruating (5.5.2.5a, 5.5.2.3.1, 2.5.2.3). Green (cited in Ralphe, 2011) points out that this contagion theory also refers to how males fear and perceive female menstruation as unclean, and are of the opinion that a female who is menstruating is contagious and will contaminate them and their manhood. As a result of the gender perceptions regarding female contamination, female learners in focus group discussions report feeling humiliated and disrespected when perceived as infected and infectious by males (*cf.* 5.7.4.1, 5.7.4.2, 2.4h).

6.2.9 Gender-based violence

All female participants reported to being directly and indirectly exposed to gender-based violence which was either domestic or social (*cf.* 5.4i, 5.7.4.5c, 2.5.2.5). Some female teachers reported experiencing gender-based violence socially whilst some respondents reported witnessing violence in the schools (*cf.* 2.5.2.5, 5.5.2.5c 5.5.2.5a). In some responses, gender based violence was reported to emanate from the home and carried over to the schools (*cf.* 5.4i, 2.4, 5.5.2.1, 5.5.2.5). In the e-learning classroom, both teachers and female learners reported that male learners swear at the female learners openly for not sweeping the class, not fetching water, and also bully them to access the fastest computers (*cf.* 5.4i, 5.7.4.5c, 2.5.2.5). According to Mabovula (2010), gender-

based harassment, which can include a range of behaviours, is based on the presumption of power relations which discriminate against female learners and females.

Female teachers also reported that they are sometimes powerless to intervene against the violent behaviour because they are not allowed to mete out punishment to male initiators, who are the ones who mostly show violent behaviour towards female learners (*cf.* 5.4k, 5.5.2.3, 2.5.2.3). Critical theorists of pedagogy, in validating the above responses, argue that education assists to shape hegemony through the schooling system; what schools do, according to Mwingi (2008), is help create and re-create existing culture, beliefs and practices in terms of hegemony and do not take responsibility for abusing females. Mwingi's (2008) point above is corroborated by the fact that some male teachers seem to perceive females as responsible for the gender-based violence that they receive from males (*cf.* 5.7.4.5c, 2.5.2.5a). As a result of the cultural gender-based violence and harassment that occurs in the schools, female respondents report reduced self-esteem (*cf.* 5.7.4.5c, 2.7.2.5). The afore-mentioned cultural gender-based violence reflects Giroux's (2008) views of schools as social sites constituted by complex dominant and subordinate cultures, each characterized by the power they have to legitimate a specific view of reality.

It is also evident from teachers' responses that female learners are susceptible to unprotected violence in the schools because gender-based violence is regarded as a norm (*cf.* 5.7.4.5c, 5.5.2.5a, 2.7.2.5). What emerged from all participants is that outdated myths are utilized to promote gender-based violence and male dominance in the schools (*cf.* 5.7.4.5c, 5.5.2.5a, 2.5.2.3.1). Gender-stereotypes feed into gender-based violence, and female learners report that they are unwilling to speak out for fear of not being assisted by the male learners in the e-learning class (*cf.* 5.7.4.2, 5.7.4.5c, 5.5.2.5a). The afore-mentioned trivialization of gender-based violence acts against the South African Police Service (2013) report which views all gender-based violence and harassment as criminal activities that are punishable by law.

6.2.10 Misogyny

According to sociologists Johnson *et al.* (2001), misogyny is a cultural attitude of hatred for females simply because they are female. In all the six schools, participants reported evidence of misogynous tendencies emanating from the societies into the schools which affect female learners' education negatively (*cf.* 5.7.4.5c, 5.5.2.5a, 2.4).

Responses from the teachers' interviews and the learners' focus group discussions show that families are sometimes the main perpetrators of misogyny, and that culture is used to justify violent behaviour towards females (*cf.* 5.4j, 5.7, 2.4, 2.4.2, 5.5.2.1) Examples of misogynous actions provided by the respondents are cultural rituals such as genital mutilation and traditional cutting off of female learners' fingers (*cf.* 5.5.2.3.2c, d, e, 2.5.2.3.2 c, d, e). The latter ritual is reported by both teachers and female learners to cause female learners to be unable to type as fast as other female learners, and the former ritual contributes to female learners missing school when menstruating due to the chafing nature of the stretched labia (*cf.* 5.5.2.3.2d, 5.7.4.5c, 5.5.2.5a, 2.7.2.5, 2.4). In addition, the ritual of forced marriages is reported by the teachers as a factor that contributes to female learners dropping out of school (*cf.* 5.5.2.3.2f, 5.7.4.5c, 2.5.2.5c). The impact of misogyny directed towards female learners resonates with Johnson and Johnson (2010) who argue that misogyny is manifested in many different ways, from jokes to pornography to violence to the self-contempt females may be taught to feel toward their own bodies.

Some male respondents seemed to believe that females deserve the misogynous treatment that they receive from males (*cf.* 5.5.2.3.2f, 5.7.4.5c, 2.5.2.5c). Some responses from males are that violent misogyny that happens to females can be excused and corrected through cultural rites (*cf.* 5.5.2.3.2f, 5.5.2.3, 5.7.4.5c, 2.5.2.5c). The above responses regarding correction of violence through culture resonate with Shor's (2007) assertion that schools sometimes socialize learners within the context of existing cultural and societal hegemonic ideologies.

6.2.11 Female disrespect

Most female participants related experiences of disrespect shown towards females by males both socially and in the school environment (*cf.* 2.4, 2.4k, 5.7, 5.5.2.5). Disrespect due to possible patriarchal ideologies seems to spill over from societies into the school arena, and some female teachers are subjected to ill-treatment by male colleagues (*cf.* 5.4k, 5.7, 2.4k, 5.5.2.5a). Crawford (2014) describes disrespect for females by males as lack of respect directed at females by males.

In most schools, participants in the teacher interviews reported that disrespect towards females is manifested in the schools mostly through negative comments and behaviour from males (*cf.* 5.5.2.5, 2.4k). In some cases, female learners in the focus group interviews report that the male learners disrespect them by swearing at them and touching them inappropriately (*cf.* 5.7, 2.4). Disrespect of females by males is also shown through male participants' comments when they casually remark about how they cheat on female learners and how female learners ask for the disrespect that they get from males (*cf.* 2.4k, 5.5.2.5). Robinson (2012) insists that from a critical theory perspective, patriarchal societies have raised males to be disrespectful towards females, as is indicative of the above responses of males.

Some female teachers report preferential treatment given to male colleagues and male learners, and this finding is corroborated by female learners in the focus group interviews where they state that female teachers are not allowed to punish male initiates and, in one school, are also not allowed to conduct the morning prayer service (*cf.* 2.4k, 5.5.2.5, 5.7.4.1, 2.5.2.2). In such cases as the one mentioned above, culture is reported as a justification for disrespect of females by males (*cf.* 5.5.2.3, 2.5.2.3, 2.4k). In addition, some male initiates are reported by the female learners in the focus groups as offering sex in exchange for assisting the female learners in the e-learning classroom, and such responses are indicative of males viewing females as sex objects (*cf.* 2.5.2.3.2, 5.7, 2.4k, 2.4g).

6.2.12 Biological determinism

Both male and female participants perceive biological determinism as affecting females in many ways (*cf.* 5.5.2.5, 2.4.1). The interview responses from both male and female teachers indicated that roles that were assigned to female and male learners were biologically determined due to the teachers' own patriarchal upbringing (*cf.* 5.4.1, 2.4). Roles referred to above are chores such as sweeping and fetching water by female learners and cleaning the chalkboard by male learners (*cf.* 5.4.1, 2.3b, 2.3d). Giroux (2008) corroborated the above responses by stating that schools are constituted by complex dominant *and* subordinate cultures, each characterised by the power they have to legitimate a specific view of reality. Moreover, biological determinism perceptions emerged from responses regarding gendered career choices whereby both teachers and male learners said that female learners should rather register for subjects that will respond to their biological nature as nurturers instead of e-learning (*cf.* 5.5.2.5a, 2.4k, 5.7.4.1).

These perceptions of male learners and teachers are corroborated by literature that shows that in patriarchal and traditional societies biological determinism plays a big role in the relationship and perceptions between the genders (*cf.* 2.4.1); in such patriarchal societies, female reproduction and sexuality, according to literature, is controlled, and males exert their control over females through sexuality and reproduction (*cf.* 2.4.1).

Furthermore, the responses from both male and female learners seemed to imply that the learners have also internalized and are resigned to the issue of biological determinism (*cf.* 5.7.4.1, 2.4.1). An example of such a response is how the female learners seem to welcome the idea of the initiation school as a vehicle towards their development as nurturers (*cf.* 5.5.2.3.2b, 2.5.2.3.2b). Moreover, the female learners indicate that the internalized biological determinism is also propelled through being given a new name at the initiation school whose meaning is steeped towards the idea of nurturing (*cf.* 5.5.2.3.2b, 2.4.1, 2.5.2.4). This new name of the female initiate seems to show how patriarchal societies use language to indoctrinate female learners and instill patriarchal values within genders (*cf.* 2.4, 2.5.2.4).

6.2.13 Public and private realms

Most female participants in the interviews indicate that they were subjected to participation barriers when they were growing up, and that they fully support some of these participation barriers (cf. 5.7.4.1, 5.5.2.5, 2.4). An example of such a perception is when two female teachers stated that female learners should not venture into technology because the internet will contribute to the loss of culture such as the language of respect (*hlonipha*) (cf. 2.5.2.5b, 2.5.2.3.1, 5.4.2). The above responses are in contrast with Silverman's (2006) assertion that critical theorists of technology view e-skilling through technology as a means of production, especially for females. From the responses of the female learners in the questionnaires, it is clear that the perceptions of teachers regarding participation barriers are carried out by the teachers in the e-learning classroom and demotivate the female learners (cf. table 5.8, 2.4.2, 1.2a). Literature shows that participation barriers targeting females are the centrefold of a patriarchal society (cf. 2.4.2, 2.4c, d, e). Besides, the public and private realms, according to literature, determine what both sexes can and cannot access and encourages gender hierarchy favouring males (cf. 2.4.2, 2.4).

The afore-mentioned gender hierarchy and entitlement is indicated in the interview responses where male learners, as per teachers' and female learners' responses, demand that the female learners should be the ones to share computers since they are *slow* and that *the male learners should each have a computer* (cf. 5.4.2, 5.5.2.5c, 1.2b, 2.4.2). Interview responses of female learners indicate that female learners are encouraged towards the private rather than public realms since their parents and teachers constantly encourage them towards 'womanly' subject choices and careers and also encourage them to rather get married than to be at school (cf. table 5.6, table 5.7, 2.4.2, 2.4c).

In line with these perceptions of the teachers and parents, the responses from the female learners' focus group interviews seem to imply that these learners embrace the issue of the private realm as their next step in life since they have been socialized in that manner (cf. 5.7, 2.5.2.1). Interview responses from the teachers also indicate the perception that female learners do not add value in the e-learning class and that they should be excluded from the e-learning class

(*cf.* 5.5.2.5, 2.4.2), which shows the exclusionist nature of private realms in patriarchal societies, according to Bam (2009).

Lastly, from the responses of all participants in this study, it appears that female learners seem to be controlled by a powerful patriarchal order whose values and beliefs come into conflict with the sacrifices that female learners have to make in order to reap the full benefits of e-learning, and hence the constant relegation to a life of marriage and childbearing which is the private realm (*cf.* 2.4, 5.4.2). Havelkova (2008) supports this view that private realms are exclusionist and explains that the private realms are environments that are socially constructed to limit people, especially females', development. Such exclusionist positions are in contrast with the social constructivism which espouses peer collaboration, regardless of gender, in order to promote learning (Muhuro, 2009)

6.2.14 Gender-role stereotyping

Most participants' responses showed that gender stereotypes are prevalent in the six schools (*cf.* 5.4.3, 5.7.4.2, 2.4.3). In the interviews, all six teachers responded that they do not believe that the female learners should be in the e-learning class due to their inability as females to cope with technology (*cf.* 5.4.3, 1.2b, c, 2.21). These responses were corroborated by the responses of female learners in the focus group interviews where they responded that they are neither coping nor motivated to be in the e-learning class because of the stereotypes raised by the teachers and male learners and due to various reasons such as lack of a supportive environment (*cf.* 5.7, table 5.4, table 5.5, 2.4.3, 1.2a).

The majority of responses from the questionnaires from both female (59%) and male (81%) learners also seem to indicate that the gender stereotypes that exist in the schools and e-learning classroom are simply perceptions and are unfounded (*cf.* 5.7, 2.4.3, 2.5.2.3.1, table 5.3). An example of the aforementioned perception is the response that female learners can never excel in technology since they do not possess an inborn ability to excel in technology based on their biological make-up (*cf.* table 5.3, table 5.4, table 5.5, 2.21, 2.4). Literature corroborates this finding through the explanation that gender stereotypes are not based on factual information but are mostly based on

perceptions and beliefs that are mostly unfounded (*cf.* 2.4.3, 2.5.2.3.1, 2.6.2). Silverman (2006) argues that technology skilling has to be viewed critically in the context of the political, ideological and cultural assumptions of the society that has given rise to it so as to improve the technology abilities of the females.

Additionally, what the responses of all participants seem to imply is that females and males have been influenced towards gender stereotyping at an early age through their backgrounds (*cf.* 2.4.2, 2.4). According to Manning (2010), gender stereotypes are the mainstay of a patriarchal society and mostly go unquestioned, especially because they are almost always linked to culture.

Furthermore, the above responses on gender stereotypes seem to promote notions of male superiority and female subordination within the schools (*cf.* 2.4, 2.4b, c, d, 5.4.3). Such subordination is evident in many teachers' responses where the teachers insist that female learners cannot lead, cannot make it in the e-learning class, and can only be good as mothers (*cf.* 5.4.3, 5.5.2.5, 2.4, 1.2). According to Sipofana (2013), gender stereotypes such as these ones are also perpetuated from an early age whereby females are viewed as emotional, fragile, and intuitive, and such traits are not suited for leadership roles.

The responses also seem to promote stereotypes of male control and female subordination (*cf.* 2.4.3, 5.4.3, 2.4f). Literature corroborates the findings wherein Joiner *et al.* (2006) assert that gender stereotypes are certain understandings within societies that preconceive capabilities of males and females, and thereby assign roles as determined by those pre-conceived capabilities. Joiner *et al.*'s (2006) explanation above is apparent in the schools, based on the stereotypical role allocation of male learners and female learners by the teachers, as per responses from both the teachers and the learners.

The discussion up to this point has focused on patriarchy and how it has influenced gender stereotypes of the participants in such a manner that it seems to affect female learners' performance in the e-learning classroom. The discussion proceeds to socialization below.

6.3 Socialization

This section contains discussion of the response findings on agents of socialization which include but are not limited to the family, religion, language, culture, schools and technology.

6.3.1 The family as an agent of socialization

Seidner (2009) explains that throughout the individual's growth, there exists a process of socialization whereby people attain experiences that teach them lessons that potentially lead them to alter their expectations, beliefs, and personalities through the socialization process.

Responses from the teachers indicated that patriarchal families treat children of different genders differently, and the home is influential in socializing male learners as superior and females as inferior (*cf.* 5.5.2.1, 2.4). Perceptions of teachers regarding the afore-mentioned, however, appeared to be mixed. Female teachers indicated that they appreciate the structure of gender roles that such a patriarchal upbringing contributes; however, they acknowledge that the male superiority issue does pose problems of voicelessness for females (*cf.* 5.4, 2.4).

Furthermore, the same female teachers seem resigned to the *status quo* (*cf.* 5.4, 5.7.1, 2.4). Such acceptance is also evident in the responses of the female learners wherein they indicate that male learners are more capable in technology and that they [female learners] would rather do other subjects because they cannot change their perceived incapability in the e-learning classroom (*cf.* 5.7, table 5.3, 2.4). Manning (2010) substantiated the finding on the role played by the home in shaping an individual's gender perceptions by saying that the home contributes to the individual's language acquisition, rituals, behaviour and forming of relationships; the first lessons of patriarchy are learnt in the family where the head of the family is a man or the father.

On the other hand, male teachers and male learners seem to view patriarchal family upbringing as a favourable norm (*cf.* 5.4, 5.7.1, 2.5.2.1). Many of their responses indicate that they were brought up in families where they were

socialized that they are superior to their female siblings, and such perceptions seem to be carried through to schools (*cf.* 5.4, 5.7.1, 2.5.2.1). In addition, reported competency in computers seem to favour male learners because of the same male favouritism whereby 98% of the male learners indicated that their parents buy them phones and encourage them to use computers, and such support is given to only 66% of the female learners (*cf.* table 5.8, 2.5.2.1). Male learners and male teachers in this study seem to be enjoying the hierarchical system of patriarchy which is validated by Lerner (2010) who points out that families play an important role in creating a hierarchical system as it not only mirrors the order in the societies, but also creates and constantly reinforces that order.

In terms of the teachers' upbringing, it seems that patriarchal family structures have played a big role in shaping their gender perceptions and their behaviour towards learners of different genders (*cf.* 5.4, 5.7.1, 2.5.2.1). For example, the female learners report that the teachers 'expect them to act like ladies and keep quiet in the e-learning classroom' while the male learners are allowed unlimited interaction with the teachers (*cf.* 5.5.2.5a, 5.7.4.5a, 2.5.2.5). According to literature, the behaviour of individuals has its foundation in an awareness of family expectations (*cf.* 2.5.2.1), which seems to be the norm in these schools. Moreover, it seems as if the teachers' gender perceptions guide the behaviour of different learners since behaviour appears to be seen as a very important factor that determines whether female learners and male learners do fit in with their socially constructed roles by their families and society (*cf.* 2.4, 5.5.2.5).

Responses of some female learners (59%) in the questionnaire indicate that their family socialization influences their esteem negatively whereby they seem to believe that computer proficiency is innately determined (*cf.* 5.4, table 5.3, table 5.4, table 5.5, 2.4, 1.2a). Literature supports the above findings that based on their home backgrounds, female learners have to contend with social constructions that portray females as having less intellectual ability than males (*cf.* 2.5.2.1). Such stereotypes of masculinity and femininity seem to also have been internalized by both males and females in this study (*cf.* 2.3a, b, d, f, g, 5.7, 5.5.2.5). Dlodlo (2010) asserts that it is because of such gender stereotypes that females are at a disadvantage and are vulnerable to violence and other

kinds of discrimination and injustices. From the female learners' responses relating feelings of inadequacy with regards to computers, it appears as if they are, therefore, bound to drop out of school, get married or have menial jobs which could open them up to more discrimination (*cf.* 5.7, 5.4.2, 2.4.2, 2.4e).

The interview responses of both male and female teachers indicate that their female learners drop out of school due to: forced marriages, initiation schools, family pressures, and added chores; these responses seem to indicate that most families in the rural traditional areas do not place much value on educating a girl child (*cf.* 5.5.2.3, 2.4, 2.5.2.1, 2.5.2.3.2a, e, f).

Mabovula (2010) explains the above findings that in most rural areas, what is important for the parents is for the daughters to get married so that the family can receive the bride-price (*lobola*) to elevate the financial status of the family. In addition, according to Lerner (2010) in a patriarchal home, parents often lack awareness of the benefits of education and training female learners. What can be surmised, therefore, from the responses of the teachers and the learners is that most female learners have been socialized in highly influential Xhosa patriarchal homes which view the female child as a temporary member to be married off to another family, and this contributes to the female child dropping out of school (*cf.* 5.7.4.1, table 5.8, 2.5.2.3). Religion, as an agent of socialization, is discussed next.

6.3.2 Religion as an agent of socialization

Most female teachers in this study indicated that religion is used to promote subordination of females (*cf.* 5.5.2.2, 2.5.2.2). The religions that the respondents were referring to are the Christianity and African religions (*cf.* 2.5.2.2, 5.5.2.2). In the African context, specifically the Xhosa culture, according to Mndende *et al.* (2008) religion is not only seen in terms of the Western churches, but also in terms of the practice of worshipping the ancestors (*ukunqula izinyanya*). One of the male teachers responded that he formed and runs a church whose majority membership is females (*cf.* 5.5.2.2). This teacher indicated that in his church leadership positions are reserved for males and females are tasked to run the Sunday school, decorate the church and do all sorts of tasks that are considered

feminine and 'soft' (cf. 5.5.2.2, 2.5.2.2). The explanation provided by this teacher is that there is a biblical verse that supports such role differentiation (cf. 5.5.2.2, 2.5.2.2). What the teacher does is what Palm-Forster (2000) points out as the various contradictions within how societies refer to the Bible to support gender discrimination against females.

Furthermore, some female learners and teachers responded that the morning service in their school is only done by male teachers because, according to the principal, God created males to lead, and females can only be followers (cf. 5.5.2.2, 2.5.2.2). Niemann (1994) cited in Palm-Forster (2000) argues on the above responses that misinterpretation of the Bible by patriarchs paints a warped picture of a woman being the subordinate in the Christian religion.

In the Xhosa traditional context where the schools in this study are located, according to Mndende *et al.* (2008), religion is not only seen in terms of the Western churches, but also in terms of the practice of worshipping the ancestors (*ukunqula izinyanya*). Therefore the discussion of religion in this section also encompasses traditional Xhosa religious practices and perceptions.

Based on the few interview responses from teachers regarding religion as an agent of socialization, it appears that there is pressure for females in general to live up to the ideologies that are determined by patriarchal rural societies in order to obey God (*Qamata*) (cf. 5.5.2.2, 2.5.2.2). Moreover, females seem to be required to act in complete obedience of the ancestors (*izinyanya*) since ancestral worship is a vital part of the Xhosa religion (cf. 5.5.2.2, 5.5.2.3, 2.5.2.2). Failure to comply is believed to be responsible for bringing the wrath of ancestors onto the female's family according to Mbiti (2007). The responses of the teachers, therefore, seem to indicate that most rural communities endorse patriarchal religious values, and females are subjected to unquestioned subordination, regardless of the form the religion takes (cf. 5.5.2.2, 5.5.2.3, 2.5.2.2, 2.4, 2.4f). The next agent of socialization which is culture is discussed below.

6.3.3 Culture as an agent of socialization

Responses from the teachers' and learners' interviews seem to indicate that culture is a powerful determinant of gender perceptions (*cf.* 5.5.2.3, 5.7.4.5c, 2.5.2.3). From the interviews and focus group interviews, teachers and learners indicated that the male learners shout at female learners who sweep in the e-learning class in their presence because sweeping in the male learners' presence is culturally unacceptable (*cf.* 5.5.2.3, 5.7.4.5c, 2.5.2.3). Further responses that show culturally determined gender perceptions are: male learners walk in-front of female learners to the computer room since, culturally, males walk in-front of females; even though fetching water and collecting wood is a physical task, culturally, it is a woman's job as the nurturer, and female learners are expected to perform these tasks in school (*cf.* 5.5.2.3, 5.7.4.5c, 2.5.2.3).

Literature explains the above gender perceptions as: culture is mostly used to control social expressiveness of females and is rigid and unquestioned (*cf.* 2.5.2.3). The afore-mentioned explanation supports responses in this study where most teachers justify African Xhosa gender relations through male-dominated ideologies which serve to advantage males more than females (*cf.* 5.4a, 5.4c, 5.4d, 5.2.3, 2.4, 2.5.2.3). Critical pedagogy theorists such as Shor (2007) support the above findings and states that the interactions in the school are so disguised under culture and beliefs such that they seem very natural (*cf.* 1.2a, 2.2.1).

Moreover, the responses of most teachers and learners indicate that culture seems to perpetuate perceptions of acceptability of gender-based violence (*cf.* 5.4i, 5.5.2.3, 2.5.2.5c). Such gender-based violent acts that emerged from the interviews of both teachers and female students are: forced marriages, rape, finger cutting, polygamy, stretching of labia, and virginity testing (*cf.* 5.5.2.3.2 b, c, d, e, 2.5.2.5c, 2.4j, 5.5.2.3.2 b, c, d, e).

Literature supports the above findings that in most cases culture, due to its fluidity and inflexibility, is mostly abused by males to dominate and violate females, as per Dlodlo's (2010) argument. Due to the violations and perceptions that are culturally-based, the female learners seem unmotivated to stay in the

schools and mostly drop out because they seem to experience disrespect and sexist attitudes from male learners; they also report feeling powerless in terms of their fate where they might be married off before even completing high school (*cf.* 5.7.4.5a, 5.7.4.5b, 5.7.4.5c, 2.5.2.3). Through cultural indoctrination, as per the responses of both female teachers and learners, it appears that females believe that they can never compete in a man's world through careers such as those that are technology-based and, as a result, the e-learning classroom does not hold any interest for the female learners (*cf.* 5.6.2.6, 2.5.2.5a, 5.7.4.5a, b, 5.5.2.5).

In the discussion of the findings below, gender perceptions on culture are further unpacked through subthemes of culture. These subthemes of culture are the *customs and rituals* practiced in traditional Xhosa communities which include but not limited to: the bride-price, forced marriages and polygamy.

6.3.3.1 Controversial Xhosa marriage practices

6.3.3.1(a) The bride price

Interview responses from the teachers and learners seem to indicate that controversial Xhosa marriage practices play a role in the female learners' lack of success in technology in the six schools (*cf.* 5.5.2.3.2f, 5.7.4.5, 2.5.2.3.2). According to teachers' responses, some female learners drop out of schools due to arranged and forced marriages to males who offer the highest bride price (*lobola*) to the families (*cf.* 5.5.2.3.2f, 2.5.2.3.2). Responses of the female learners in the focus groups seem to indicate that they do not have a choice in the matter of the bride price, and their future is determined by the highest bidder of the bride price (*cf.* 5.7, 2.5.2.3.2).

What these responses regarding the bride-price seem to indicate is that female learners are being objectified by their families and the males who marry them forcefully (*cf.* 5.7, 2.5.2.3.2). According to literature, although the bride price has a history of good intentions between the male learners' and female learners' families, there seems to be a shift in the focus of female learners' families towards treating female learners as economic commodities (*cf.* 2.5.2.3, 2.5.2.3.1).

6.3.3.1(b) Forced marriages

Most female respondents, particularly the teachers, indicated that forced marriages cause female learners to be treated as objects and given for forced marriage by their fathers to the man with the highest bride-price (*cf.* 5.5.2.3.2f, 2.5.2.3.2). The issue of forced marriages, from the learners' and teachers' responses, seems to be linked to the bride price issue already discussed in the section above (*cf.* 5.5.2.3.2f, 2.5.2.3.2). According to the interview responses of some of the teachers, forced marriages seem to be a fate for most of the female learners in the schools and, when they occur, the female learners do not have a voice to protest against such a practice (*cf.* 5.5.2.3.2b, 2.5.2.3.2b).

According to the teachers, forced marriages cause female learners to drop out of school and from the e-learning class (*cf.* 5.5.2.3.2b; 5.5.2.3.2f, 2.5.2.3.2b). What the dropping out of school implies is that the female learners' future has been sacrificed by the family for economic gain, especially since the female learners are mostly never part of the negotiations (*cf.* 5.5.2.1, 5.5.2.3.2b; 5.5.2.3.2f, 2.5.2.3.2b).

As a result of forced marriages, responses from the female learners and the female teachers show that a number of female learners have dropped out of schools (*cf.* 5.7.4.5, 5.5.2.3.2b, 5.5.2.3.2f, 2.5.2.3.2b). One case cited by a teacher indicates that culture is used to justify violent behaviour towards females (*cf.* 5.5.2.3.2, 5.5.2.3.1, 2.5.2.3, 2.5.2.5). The above-mentioned case refers to a girl who escaped abduction towards forced marriage but had to stay in hiding and missed school for a month due to the violent beatings that she endured during the abortive abduction (*cf.* 5.5.2.3.2, 5.5.2.3.1, 2.5.2.3, 2.5.2.5).

6.3.3.1(c) Polygamy

Although there were not many responses to the polygamy issue, some teachers' responses point to this practice as also being a contributing factor to the drop-out rate of female learners from schools (*cf.* 5.5.2.3.2, 2.5.2.3.2). According to responses from the teachers, polygamy, the bride-price, and forced marriages are linked because in all of these female learners are never given a choice regarding their future (*cf.* 5.5.2.3.2f). In the case of polygamy, the teachers indicated that the female learners live in dread of this practice and are not

motivated to stay in school since they perceive their fate of forced and polygamous marriages to be around the corner when they reach puberty (*cf.* 5.5.2.3.2, 2.5.2.3.2)..

Conversely, due to the patriarchal society's socialization that a woman's place is with her in-laws, some female learners, particularly those who attended initiation schools, indicated their readiness to drop out of school and get married even if it is a polygamous marriage (*cf.* 5.7.4.3, 2.5.2.3.2b). Mabovula (2010) supports the findings in saying that some females would rather be in a polygamous marriage than to remain unmarried in patriarchal societies due to the pressure on females to be married. The next agent of socialization which is language is discussed below.

6.3.4 Language as an agent of socialization

According to Gergen (2011), language is a dominant tool that socializes people globally. Responses to the issue of language as an agent of socialization were received from teachers only and not learners (*cf.* 5.5.2.4). Male and female teachers' responses indicated mixed perceptions regarding language as an agent of socialization (*cf.* 5.5.2.4). Responses from female teachers indicated that learning the language of respect (*hlonipha*) places an added burden on the newly wed females, in addition to having to adjust to their new homes (*cf.* 5.5.2.3, 5.5.2.3.2, 2.5.2.4). On the other hand, according to the male teachers' responses, the language of respect offers a structured way that brings pride to being a Xhosa male (*cf.* 5.5.2.3.2a, 2.5.2.4, 2.4). The above responses cite how in the initiation school males are taught to use the language of respect (*cf.* 5.5.2.3.2a, 2.5.2.4). The irony of the above-mentioned male teachers' responses is that the new initiates are reported to use words such as *snot* (*izigqwathe*) to refer to females as their language of respect, and this word is viewed by female teachers and learners as verbal degradation (*cf.* 5.5.2.3.2a, 2.5.2.4, 2.4k, 5.7.4.5c). Literature supports the above findings that language in patriarchal societies is often used to degrade females to a lower social status (*cf.* 2.5.2.4).

The mixed responses here might be attributed to the fact that literature states that in Xhosa traditional communities it is mostly the females who are exposed to discrimination through the pressure of the language of respect (*hlonipha*) (*cf.*

2.5.2.3, 2.5.2.4). In validating the above findings, according to Peires (2010), in the Xhosa culture the language of respect (*hlonipha*) is mostly influential in fostering gender differences. West and Zimmerman (2008) support the above assertion by pointing out that the manner in which males and females interact using language may reinforce essential gender differences which maintain power differences.

Some responses from teachers indicate that in schools, since some female teachers are culturally prohibited to use certain words that are considered taboo for use by females, they experience a challenge in teaching subjects such as Biology or Life Orientation where they have to refer to parts of the anatomy (cf. 5.5.2.4, 2.4, 2.5.2.4). In the above-mentioned cases, the teachers report that their learners learn the names of the anatomy in the language of respect (*hlonipha*), and the above point seems to compromise the quality of education (cf. 5.5.2.4, 2.4, 2.5.2.4).

Additionally, Xhosa proverbs are reported by participants as having power and significance in influencing gender perceptions (cf. 5.5.2.4, 2.4, 2.5.2.4). Such idioms are taught in the initiation schools and also in the IsiXhosa syllabus in the schools. Examples of such idioms are: *a woman without a man is like a field without seeds; a house with daughters only will never grow beyond that generation*. According to the teachers, such idioms promote male superiority and pressure for females to cherish marriage over education (cf. 5.5.2.4, 2.4, 2.5.2.4). Lastly, some newly initiated female respondents reported the pride they had in their new names such as *Nokhaya* (home-maker) and *Nomzi* (the one who is destined to be married and live with her in-laws) which they were given at the initiation schools (cf. 2.5.2.3.2, 5.7.4.3). According to the female learners, such names give them a sense of achieving adulthood and respect from their peers and communities (cf. 2.5.2.3.2, 5.7.4.3).

Below, the discussion proceeds to findings on schools as environments where factors that affect e-learning proficiency of girls occur.

6.3.5 Schools

Discussions of findings on schools are made within the context of factors that have been identified by literature as affecting e-learning proficiency of female learners. These factors are teachers, curriculum, peers, support of female learners, and gender-based school violence in the schools.

6.3.5.1 The teachers

Discussion of findings regarding teachers, as one the above-mentioned factors, is done under the following headings: teachers' perceptions of vocational choices for different genders, gender-sensitive e-learning, and teachers' favouritism of male learners over female learners in the e-learning classrooms.

6.3.5.1(a) Perceptions on vocational choices for different genders

Teachers' responses in the interviews were very specific about how they perceive vocational choices (*cf.* 5.5.2.5a, 2.5.2.5). All the teachers' (including females) responses seemed to agree that they perceived vocational choices to be strictly gender-based, and most of them indicated that there is no place for female learners in the e-learning classroom (*cf.* 5.5.2.5.a, 2.5.2.5a, 1.2a, b). Some teachers responded that their belief systems on vocational choices were influenced through being socialized that female learners either became nurses or teachers (*cf.* 5.5.2.5.a, 2.5.2.5a, 1.2a, b, 2.5.2.3.1). The teachers further responded that they perceived the many vocational choices available to female learners as confusing to the female learners (*cf.* 5.5.2.5.a, 2.5.2.5a, 1.2a, b). The issue raised by such responses was that the female learners might lose their sense of culture and then could not cope in a man's world (*cf.* 5.5.2.5.a, 5.5.2.3.1, 2.5.2.5a, 1.2a, b).

The responses above were also mostly substantiated by teachers by citing the low success that female learners show in the e-learning class (*cf.* 5.5.2.5.a, 2.5.2.5a, 1.2a, b). Literature by Mlitwa (2009), Isaacs (2007) and Ralphe (2011) resonates with the teachers' perceptions of vocational choices in that in most patriarchal societies, traditionally male subject choices such as Science, Mathematics, and Technology are still viewed by most teachers as strictly suitable for male learners.

Most responses of teachers also indicate their values regarding female learners, traditional male subjects and vocations (*cf.* 5.5.2.5b). These values, according to the teachers, are that the traditional manner in which female learners have been brought up cannot coexist with modern perceptions of vocational choices (*cf.* 5.5.2.5b, 2.5.2.5b). Such responses seem to indicate that female learners have to contend with social constructions originating from their homes that portray females as having less intellectual ability than males (*cf.* 5.5.2.5b, 2.5.2.5b, 2.4, 2.5.2.1). Literature confirms the afore-mentioned social constructions as perpetuating perceptions of female roles, responsibilities and functions in societies as predominantly biological and social (*cf.* 2.5.2; 2.5.2.1).

As far as home background of the teachers is concerned, it seems that there is a social and cultural capital that they bring into schools (*cf.* 2.5.2.3). According to literature, such capital is drawn from the family background, personal experience and one's personal view of life since most participants' responses indicated that they embrace their patriarchal background (*cf.* 2.5.2.3, 2.4, 2.5.2.1, 5.5.2.5a). Even though patriarchy seems to have its disadvantages, especially for the female respondents, most female participants indicate that the highly structured manner in which patriarchy is built makes them secure in their knowledge of gender roles (*cf.* 5.5.2.5a, 2.4, 2.3e).

The teachers' responses indicate that, possibly, the gender perceptions which they hold regarding vocational choices of different genders are based on their background influences which they then apply in the schools (*cf.* 2.5.2.3, 5.5.2.5a). According to Bam (2009), the extension of the teachers' gender perceptions from the society to the schools has an impact on schools which tend to be unwary custodians of socio-cultural values.

6.3.5.1(b) Teacher perceptions of gender-sensitive e-learning and curriculum

Responses of teachers seemed to indicate that all the teachers have a limited understanding of what gender-sensitive education is (*cf.* 5.5.2.5, 3.3.3). The teachers' understanding of gender awareness, according to their responses, is that the subject Life Orientation exists in schools for addressing issues of gender sensitivity (*cf.* 5.5.2.5b, 2.5.2.5b). Most teachers' responses also indicate

that they are unable to address gender issues in each one of their subjects given the huge numbers of learners that they have to teach (*cf.* 5.5.2.5, 2.5.2.5a, 2.5.2.5b). The issue of a gender-sensitive approach to teaching and learning being relegated to the Life Orientation class shows that the teachers see the need to boost motivation in female learners as the Life Orientation teacher's responsibility and not theirs (*cf.* 5.5.2.5, 2.5.2.5a, 2.5.2.5b). Such responses seem to concretize the teachers' unawareness of how gender-sensitive e-learning is meant to be implemented (*cf.* 2.5.2.5, 5.5.2.5).

The teachers' perceptions of gender-sensitivity in e-learning also seem to show that they do not see gender-sensitive teaching as their responsibility (*cf.* 5.5.2.5b). According to literature, success in a mixed gender classroom rests with, among others, the implementation of gender-inclusivity in teaching and learning; the teachers' perceptions above show that they do not apply gender inclusivity in their classrooms (*cf.* 5.5.2.5, 3.3.1). All the teachers' responses indicated that in the 2005 Curriculum and Curriculum Assessment Policy Statements (CAPS) in-service trainings, the issue of gender-sensitivity in class was mentioned but only in passing since this has no bearing on the learning outcomes of the subjects (*cf.* 5.5.2.5, 3.3.2, 1.2). The teachers' responses above also show that the issue of gender sensitivity in teaching is not treated as an important matter in their trainings, and this seems to explain their perceptions towards the issue (*cf.* 5.5.2.5, 3.3.1, 1.2).

Lack of understanding of gender-sensitive learning on the part of the teachers seems to contribute to an even lower self-drive for the female learners, as per their responses (*cf.* 5.5.2.5b, 3.3.1, 5.7.4.5). One of the teachers responded that, if the learner comes to school lacking in self-confidence, there is not much a teacher who has 120 learners can do to motivate one learner (*cf.* 5.5.2.5b). According to the teachers' responses, lack of motivation in the e-learning classroom in female learners is linked to the female learners' negative attitudes towards e-learning, and, according to the teachers, the school and community has very little to do with it (*cf.* 5.5.2.5b, 3.3.1, 2.5.2.5b). What the teachers seem to be missing, according to Gobodo-Madikizela (2009), is that the female learners develop resentment and react by choosing to remain nameless entities

in the classroom either as an act of defiance or to show that they are indeed what the teachers and male learners think they are.

Importantly, in all the six schools, the responses of the learners and the teachers show, in varying degrees, that the schools provide an environment that is not conducive to e-learning for the female learners (*cf.* 5.7.4.5b, 5.6.2.6, table 5.8, 2.5.2.5b). Gobodo-Madikizela (2009) also states that withdrawal is typical of females in co-education classrooms, especially in patriarchal societies. In this particular study, female learners seem to experience the crushing of their self-worth and believe that their teachers simply do not want them in the e-learning class, as per various responses from the female learners in the focus group interviews (*cf.* 5.7.4.1, 2.4). Giroux (2008) corroborates the above findings that due to the 'hidden curriculum' students tend to internalize values which stress abnormal respect for authority, docility and conformity.

Mwingi (2008) supports the above-mentioned responses and states that unsupportive teacher-student relationships foster demotivation and lack of drive among school female learners. Generally speaking, the lack of support received from male and female teachers, the Education Department, and male schoolmates, is an indication that female learners receive their education in an environment that is not inspiring (*cf.* 5.7.4.5b, 5.6.2.6, table 5.8, 2.5.2.5b).

6.3.5.1(c) Teacher favouritism of male learners in the e-learning classroom

Responses from both the teachers and learners (in the focus group interviews and questionnaires) showed that the e-learning teachers interact differently with male learners and female learners in the classroom (*cf.* 5.5.2.5a, 5.7.4.5a). By their own admission, the teachers favour male learners because they perceive female learners as *lazy, slow and always behind on the syllabus* (*cf.* 5.5.2.5a, 2.3d, g, 2.4l, 2.5.2.5a, 5.4g, 5.4.3). These responses are in contrast with the role that the teacher in a socio-constructivist e-learning class, as underpinned by Lajoie and Derry (2007), should play (*cf.* 3.2, 3.3). Lajoie and Derry (2007) state that the e-learning teacher should be an Instructional designer, collaborator, advisor, team coordinator, and a monitoring and assessment specialist (*cf.* 3.2).

Part of the most important findings from both the teachers' and the learners' interviews were that the communities in all the six schools believe that female learners and male learners as well as adult females and males should stick to different roles (*cf.* 5.5.2.3, 5.7.4.1, 2.3d, 2.4, 5.7.4.2). This gender role differentiation seems to inform the way the teachers interacted with different genders in the schools and e-learning classrooms in this study as per their responses in the interviews (*cf.* 5.7.4.1, 2.3d, 1.2b, c). Such gender differentiation that appears to translate to behaviour of teachers towards learners tends to compromise the learning outcomes, according to Manning (2010), and it seems evident in the findings of this study (*cf.* 5.5.2.5a, b, 2.5.2.5, 2.11).

A good example of how gender role differentiation affects success in the classroom, especially for female learners, is ineffective group-work that occurs in the e-learning classroom as reported by the learners in their interview responses (*cf.* 5.7.3.3, 1.2b, 2.5.2.5). In the questionnaire and the focus group discussions, responses about group-work pointed to the fact that male learners were unwilling to share computers and tasks with female learners (*cf.* table 5.8, 5.7, 2.5.2.5b). The unwillingness to collaborate on tasks appears to be detrimental for the female learners who rely partly on the unwilling male learners to assist them (*cf.* 5.7, 2.5.2.5b).

In view of the above responses regarding lack of cooperation between female learners and male learners, Ralphe (2011) emphasizes that cooperative learning is a cornerstone of outcomes-based teaching methodologies. What is happening in the six schools, therefore, seems to imply that the female learners miss out on the many benefits of group work that are pointed out by Ralphe (2011) above (*cf.* 2.5.2.5b). Moreover, Giles (2003) (cited in Muhuro, 2009) affirms the benefits of group-work that the above-mentioned learners seem to be missing, such as: social skills, acknowledging others' ideas and considering others' perspective on issues, stating ideas freely, resolving conflicts democratically, sharing tasks equitably, and allocating resources fairly among group members.

In addition, male learners in this study seem to dominate in the e-learning classes in a number of ways as per the teachers' and female learners' responses (*cf.* 5.5.2.5a, 5.7.4.1, 5.7.4.2, diagram 5.1, 2.5.2.5a). Male learners seem to be encouraged by the teachers to talk and engage verbally with teachers more than female learners who are encouraged to talk less and 'behave like ladies' (*cf.* table 5.8, 2.5.2.5a, 5.7.4.5).

6.3.5.1(d) Teachers' perceptions of the Department of Basic Education support

Responses regarding the extent of teachers' support from the Department of Basic Education (DBE) mainly came from the teachers and the District official (*cf.* 5.5.2.5a, 5.6). Responses of the teachers and the District official seem to indicate that there is not enough support from the District Office for the teachers to implement gender-sensitive e-learning even if they were in favour of it, which, at the time of the interviews, they were not (*cf.* 5.6.4, 2.5.2.5a). Teachers cited many gaps in the support by the DBE. Such lack of supported is cited in literature as a predictor of doom for any newly implemented initiative such as e-learning in this case (*cf.* 2.5.2.5).

The teachers' responses indicate that they are under pressure to complete the syllabus and produce good results in the Eastern Cape Province where this study was conducted (*cf.* 5.5.2.5a, 2.5.2.5). According to the District official's responses, there seems to be continuous stress on teachers (*cf.* 5.6) as this province has had a history of poor performance for the past ten years according to Dinaledi's (2012) schools report. Such stress possibly causes teachers to perceive the issue of gender-sensitivity in their teaching as unimportant (*cf.* 5.5.2.5a, 2.5.2.5a). In South Africa, the National Senior Certificate results tend to take the upper hand when a high school is being evaluated, and according to Mwamwenda (2007), matric results mark a school as having quality, reliability and longevity.

What Mwamwenda's (2007) statement implies for this study, therefore, is that while the policies might be in place for e-learning, interviews with teachers and the District official indicate that their core business is to rush through the syllabus in order to have good matric results (*cf.* 5.5.2.5a, 5.6, 2.5.2.5a).

Responses from teachers also showed a gap in their computer skills which they need in order to offer quality e-learning and teaching (cf. 5.5.2.5a, 2.5.2.5a). Only two of the teachers responded that they had received computer training at the Further Education and Training (FET) College (cf. 5.5.2.5a). These teachers are the younger ones while the other four teachers aged 35 and upwards had never received any prior training at the teacher training colleges that they attended (cf. 5.5.2.5a). It must be noted that all teachers received training on basic computer skills and the e-learning software when they began the e-learning class with the *proviso* that the Department of Basic Education will provide further upgrade training.

From the interview responses, teachers reported that they received only one computer-training session in three years despite the evolutionary nature of the technology (cf. 5.5.2.5a, 3.3.1, 1.2a, b, c). The majority of the teachers also indicated that they are not very keen to use computers in their teaching and would gladly exchange the role with another teacher (cf. 5.5.2.5a, 3.3.1.3, 1.2a, b, c). Literature shows that the teachers' attitude towards technology affects the learners' attitudes towards technology as well (cf. 2.10, 3.3.1.3, 1.2). From the responses, it seems as if most teachers in this study have low levels of computing and technology skills but have been allocated the task to offer e-learning due on a task-need basis (cf. 5.5.2.5a, 5.6, 2.5.2.5a). These responses show that the quality of e-learning that these teachers are offering is possibly affected by their lack of computer skills (cf. 3.3.1.3; 2.5.2.5c, 3.3.2, 1.2).

6.3.5.2 Gender-Based violence and harassment in schools

The responses of both teachers and learners point to the existence of gender-based violence and harassment in the schools (cf. 5.7.4.5c, 5.5.2.5c, 2.5.2.5c). There seem to be reported incidences of bullying in the e-learning classroom where female learners are shouted at by male learners for being slow at catching up, with statements such as "*how many times must I tell you?*" (cf. 5.7.4.5c, 5.5.2.5c, 2.5.2.5c). Moreover, female learners report being shouted at by male learners for sweeping the computer room late and exposing the male learners to dust which will affect their "manhood" (cf. 5.5.2.5c, 5.5.2.3.1, 5.5.2.3, 2.5.2.4c). The two examples point to incidences of verbal abuse which are

reported by female learners as frustrating and demeaning (*cf.* 2.5.2.5c, 5.7.4.5c). In addition, culture seems to be used by the respondents to justify violent behaviour towards female learners (*cf.* 5.7.4.5c, 5.5.2.5c, 2.5.2.5c, 5.5.2.3). Manning (2010) validates these findings by indicating that in patriarchal societies there exists a myriad of myths that are unquestioned due to their cultural link, and which serve to make males dominate females.

The following incidences reported by female learners seem steeped in the male dominance issues and gender stereotypes characteristic of patriarchal societies (*cf.* 2.4, 2.4.3) as per Manning's (2010) assertion. The responses are: female learners reporting being bullied to move over to a spot that is exposed to sunlight in the e-learning class since it is not a manly thing to sunbathe (*ukugcakamela ilanga*); male learners shouting at female learners for not bringing in fresh drinking water for the class on time and calling them useless; female learners being bullied to give up a "fast" computer to a boy because "slowness is a woman's thing" (*cf.* 5.5.2.5c, 5.5.2.3, 5.4d, e, g, j, 2.5.2.5, 2.5.2.3.1).

Another form of abuse that was brought up in the responses by the teachers and female learners is sexual harassment of female learners by male learners (*cf.* 5.5.2.5c, 5.7.4.5c, 2.5.2.5). Regarding sexual harassment in the six schools, various responses, especially from the female learners' focus groups, indicated that such a practice is prevalent in the schools (*cf.* 5.7.4.5c, 2.5.2.5c). In one case, a teacher indicated that he does not allow female learners into his office (he does not sit in the staffroom since he is the Head of Department) since they are likely to accuse him of sexual harassment (*cf.* 5.5.2.5c). This teacher's response resonates with literature that maintains that in some societies females are seen as the perpetrators of violence that happens to them (*cf.* 2.5.2.5.c).

The above teacher's response was corroborated by his learners' responses who indicated that such lack of access to the e-learning teacher contributed to them not being able to catch up in the e-learning class due to their limited access to the teacher (*cf.* 5.7.4.5a, 2.5.2.5a, 3.3.1.4). The implications of the discussion with these female learners are that South Africa's high statistics of sexual harassment and violence against females, according to the South African Police

Service Report (2013), seems to be existing within the school environments as well. One response from a female learner indicated that such harassment from the newly circumcised male learners occurs in the e-learning class where they offer assistance if the girl promises sexual favours (*cf.* 5.7.4.5.a, 2.4 e, g).

In addition, within the issue of sexual harassment, the responses seem to indicate the voiceless-ness of the females in these schools (*cf.* 2.4, 5.7.4.5a, 5.5.2.5a). Such voiceless-ness was indicated by the responses of female learners who said they do not raise the harassment issue with male learners lest they be labelled as *conceited* (*cf.* 5.7.4.5.a, 2.4 d, e, g). Given the fact that the e-learning teacher is a male who also does not encourage the female learners to approach him after class “for their own protection”, it is then assumed that the problem of harassment will persist in the school.

Linked to the issue of sexual harassment is the disrespect of females by males (5.4k). According to Gobodo-Madikizela (2009), all forms of harassment and violence against females and children point to disrespect for the opposite sex. Examples of such disrespect were reported by two female teachers and some female learners whereby newly initiated male learners disrespect female teachers since the female teachers are not allowed to punish them (*cf.* 5.4k, 2.4k).

From the responses of the teachers on the issue of school gender-based violence, only two out of the six teachers acknowledged that violence does occur in their school and could contribute to female learners’ negative attitude towards schools, together with poor performance (*cf.* 5.5.2.5c, 2.5.2.5c). From the responses of female learners’ grabbing a girl’s body part by male learners, slapping, swearing, and overall bullying seem to be a daily occurrence in these schools and this is described as a win-win situation by some teachers (*cf.* 5.5.2.5c, 5.7.4.5c, 2.5.2.5c). Additionally, female learners in the focus groups and teachers reported that there is corporal punishment for female learners whenever they sweep the e-learning classroom in the presence of the male learners (*cf.* 5.5.2.5c, 5.7.4.5c, 2.5.2.5c). Such prevalence of violence, although unchallenged by female learners, does seem to affect them and their attitude towards school generally judging by their responses in the focus groups (*cf.*

5.7.4.5c, 2.5.2.3.2b) as they indicated that they would rather be in initiation schools and marry afterwards than be at school.

During some of the school visits, the researcher witnessed male learners touching female learners inappropriately in the computer labs, and when she interviewed the schools' e-learning teachers, the teachers' justification was that the female learners are not complaining, so they like it or they do not mind (5.5.2.5c). From the teachers' responses regarding the female learners not speaking out against the harassment by male learners, they perceive the quiet as an indication that the female learners are accepting of the abuse that is meted out to them by male learners (5.5.2.5c, 2.5.2.5c). Mabovula (2010) argues that when abused people do not speak out against the abuse, this does not imply acceptance of their abuse. Mabovula (2010) further maintains that it is therefore very important to create spaces for voicing issues through narrative enquiry such as the one used in this study. Mabovula (2010) is of the opinion that speaking out assists in situations where the assumptions, experiences, and values of some members of the society dominate, and those of others are misunderstood, devalued, or reconstructed to fit the dominant paradigms (2.5.2.5c).

6.3.6 Lack of female learners' support in the e-learning classroom

As mentioned in Chapter 2, critical theory of pedagogy informs the theoretical framework of this study (*cf.* 2.2). In particular, critical theory of pedagogy was used to determine the existence of imbalances and anomalies between female learners and male learners in e-learning in the six schools (*cf.* 2.2.1). Most of the responses regarding support afforded learners of different genders in the e-learning class were collected from the questionnaires and focus group interviews (*cf.* 5.7, 5.8). Responses from all participants seem to show evidence that suggests that the schooling experiences of female learners in the six schools in e-learning is very negative and exists in an unsupportive environment (*cf.* 5.6.2.6, tables 5.1, 5.2, 5.3, 5.4, 5.5, 5.7, 5.5.2.5, 2.5.2.5, 5.5.2.6c, 2.4).

Findings from the questionnaires show that there is insufficient access to computers for the learners where 80% of the male learners as against only 26% of the female learners have access to the computers more than twice a week

(*cf.* table 5.9). The access referred to in this study is on the computers, the laboratory, information on technology careers, to the teacher, and to content knowledge.

All the participants in this study, that is, teachers and learners, agree that there is a challenge regarding accessing computers for e-learning (*cf.* 5.5.2.6, 5.7.4.6, 3.3.1). The teachers and male learners cited time-tabling issues and large classes as a factor that affects proficiency in e-learning (*cf.* 5.5.2.5b, 5.7.4.6, table 5.10). Teachers also responded that they have had to sacrifice classrooms in order to accommodate the computer laboratories (*cf.* 5.5.2.5b).

Female learners' responses, however, pointed out that the insufficient access to computers and support from the teachers affects their performance and attitude towards the e-learning class (*cf.* 5.7.4.5a, 5.7.4.6, table 5.11). The female learners' responses seemed to indicate the nature of female domination in patriarchal societies that they live in (*cf.* 2.4a, b, c, d, e, f, g).

According to the District official, due to limited space and infrastructure in the six schools, the numbers of computers that could be fitted per school is very limited, and this limitation seems counterproductive with regards to the e-learning objectives (*cf.* 5.6, 3.3.2.3). In addition, according to the District official, rural and informal settlement communities, where five schools in this study are situated, suffer from geographic isolation, low bandwidth, and unreliable connections in addition to the space problems cited above (*cf.* 5.6, 3.3.2.3). The District official also indicated that in most of these schools in this study, there are sometimes more pressing issues such as sanitation, electricity and school buildings, and, as such, accommodating e-learning becomes less of a priority (*cf.* 5.6, 3.3.2.3). Regardless of the infrastructural challenges existing in these schools, however, it seems that the few e-learning facilities that exist are prioritised for male students rather than for female students by the teachers (*cf.* tables 5.6, 5.7, 5.9, 5.10, 3.3.3), and this limit of access to computers for female learners is indicative of the gender favouritism discussed earlier in this chapter (*cf.* 5.5.2.5b, 2.5.2.5b).

As a result of such favouritism of male learners by the teachers, female learners seem to have accepted their own inadequacy as far as computer skills abilities

are concerned (cf. 5.7.4.5, 2.2.2.5, 3.3.3). From the interviews of both teachers and learners, the issue of male learners being elected by teachers to assist female learners in computers also indicates the elevated status of male learners by the teachers (cf. 5.5.2.5a, 5.7.4.5, 2.4), which seems to continuously demonstrate to the female learners that they are not and cannot be on par with male learners as far as e-learning is concerned.

The unsupportive environment referred to above seems to affect the female learners' technology perceptions as they indicated in their responses that they would rather pursue careers that are "soft" and are not interested in technology-based careers (cf. 5.7.4.5, 3.3.1). Literature points out that gender unsupportive learning environments have a tendency to pressure females away from modern vocational subjects and careers (cf. 2.5.2.5.2a, 3.3.2.3). From the female learners' responses in the focus group interviews, it appears as if female learners' perceived realities of technology translates to technology being detached from their own lives, and that while they are aware of its benefits, their constant awareness of inadequacy makes them disinterested in it (cf. 5.7, table 5.3, 3.3.3, 1.2).

The other issue raised by the responses of female learners is that the e-learning for both genders is on an unequal footing (cf. 5.7, table 5.8, 3.3.1, 1.2). The female learners explained this perception by saying that, while the teachers are under the assumption that the female learners are receiving support from their male peers, the shouting that the female learners receive from the male peers makes this "support" not worthwhile (cf. 5.5.2.5a, 3.3.3, 5.7). The female learners also seem to be perceived by both the male learners and teachers as a "nuisance" in the e-learning class, as per the interview responses of the male learners and teachers (cf. 5.5.2.5a, 5.7, 2.5.2.5a). Moreover, the male learners' focus group responses also point to resentment of the female learners being in the e-learning class because the female learners seem to "slow down" the pace, and that *it's very nice when they (female learners) are absent* (cf. 5.5.2.5a, 5.7, 2.5.2.5a, 2.4a). This resentment, in addition to gender perceptions, indicates the existence of competition regarding resources in a place where the well-meaning establishment of e-learning exists, but shows evidence of poor planning when

measured against Cohen *et al.*'s guidelines (2011) for effective e-learning implementation.

From the interviews and questionnaire responses, the unsupportive and harsh e-learning environment, and the experiences of the female learners in these six schools seem to draw a bleak picture regarding the female learners' future where e-learning is concerned (*cf.* 5.7, 5.8, table 5.8, 3.3.3, 1.2). In addition, according to literature, high school education is critical since this is the stage where the learners are preparing for their career pursuits (*cf.* 2.5.2.5.2a). Mwamwenda (2010) adds that it is at the high school stage where female learners ideally should be holding high aspirations for themselves with regard to higher education and careers, which seems not to be happening in these schools.

Life Orientation, according to the interview responses of the teacher, the District official, and male learners, exists as part of a nurturing environment for the female learners (*cf.* 5.5.2.5a, 5.6, 5.7, 5.4d). Somehow Life Orientation is viewed by the teachers and the District official as a subject that will be able to fix the female learners' problems of career choices (*cf.* 5.5.2.5a, 5.6, 5.7, 5.4d). However, the underlying problems which seem to stem from the prevalent gender perceptions in the schools seem to be ignored (*cf.* 5.5.2.5a, 5.6, 5.7, 5.4d, 2.4).

Some male learners' responses in the focus groups go as far as pointing out that female learners should pursue careers that have something to do with beauty and or those that have something to do with speaking to people such as public relations and journalism (*cf.* 4.7, 5.4d, 2.4). Such vocational gender stereotypes seem to be reflective of gender perceptions that are prevalent in patriarchal societies (*cf.* 2.4a, b, d, e, h, j, 2.3f, 5.7.2.4). Furthermore, literature states that in such patriarchal and unsupportive learning environments, there is a high likelihood for the female learners' aspirations to become sacrificed at the altar of womanhood, motherhood, and the pressure to conform to socio-cultural values and expectations: (*cf.* 2.5.2.5b, 2.4).

From the responses of the learners in the focus group interviews and questionnaires, it appears that gender unsupportive learning environments that

exist in the six schools affect the ability of female learners to develop computer skills in the e-learning classroom (*cf.* 5.7, 5.8).

The teachers' gender perception effects on the female learners' computer skills are: constant absenteeism of female learners from the e-learning classroom; female learners always behind in the syllabus and not up to the level of the male learners; female learners performing poorly in the e-learning classroom; female learners not speaking out and asking for help from the teacher when they do not understand the content in the e-learning class, which makes them feel inadequate in the e-learning class; female learners not able to ask the teacher to clarify content issues after class; and female learners not asking for help from the male learners (who are ahead) for fear of being shouted at, thus causing them to lag behind in the class content (*cf.* 5.7, 5.8).

Additional negative issues that seem to have affected that female learners' computer skills are: female learners not encouraged to attend the e-learning class and being given the option to do other tasks in the classroom instead since they are behind anyway; female learners not being encouraged by teachers and parents to pursue technology-based careers, thus resulting in female learners shunning the e-learning class as irrelevant to them; negative treatment from both the teachers and the male learners, making female learners feel worthless in the e-learning classroom; the uncondusive, overcrowded e-learning lab becoming unattractive for the female learners; fighting over chairs and computers with male learners thus making female learners reluctant to go to the e-learning classroom, especially when some of the male learners are not punished for such behaviour (table 5.8, 5.5.2.5a, 5.5.2.5b, 5.7.2.5a, 2.4, 3.3.3, 5.6, table 5.3, table 5.4, table 5.7, table 5.10, table 5.11, 1.2).

6.4 Chapter reflections

To conclude this chapter, based on the synthesized responses and literature, there seems to be overwhelming evidence that teachers' gender perceptions contribute to the female learners not achieving computer skills. The above gender perceptions indicate acceptance among all the respondents (teachers and learners) that culture cannot be questioned, and that female subordination

is something that is meant to be. In addition, there exists a myriad of myths that seem to determine behaviours and gender stereotypes of all the participants, and these seem to have a powerful hold over both learners and teachers. Such gender perceptions are prevalent in the responses of all female and male teachers, the male learners, and the female learners.

Moreover, there are various options that the female learners seem to explore in their quest of freeing themselves from the harsh environment of the e-learning classroom. Some of these options are falling pregnant in order to source the Child Grant from the Department of Social Development (which they get to share with the babies' fathers), attending initiation schools and getting married.

Critical theorist Giroux (2008) argues that teachers need to acknowledge that schools are not neutral sites, nor is the curriculum, and that what the students learn from the formal curriculum is much less important than what they learn from the ideological assumptions embedded in the school's three message systems: the system of curriculum, the system of classroom pedagogical styles, and the system of evaluation.

Lastly, in view of the critical theory perspectives, findings in this chapter seem to indicate that, despite phenomenal legislated development towards e-education through the White Paper on e-education (DoE, 2004), there seems to be a gap in the actual implementation of such legislation in the schools with respect to gender.

The next chapter, Chapter 7, presents this study's conclusions and recommendations.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

In order to conclude the thesis, this chapter looks back, reviews the findings and results and relates these to the literature and theoretical framework in order to draw the threads together critically. Firstly, this chapter reconsiders the research questions posed and the purpose for the research being undertaken before proceeding to draw conclusions based on the research findings and linking the conclusions to the theoretical framework presented in Chapters 2 and 3. Secondly, this chapter considers the significance of the conclusions so as to inform recommendations and suggestions for further research.

This thesis reports on the results of a QUALI-quantitative study conducted in six schools that are located in rural and semi-rural locations. The research questions that this study sought answers to were:

- a) What are the e-learning teachers' gender perceptions?
- b) To what extent do the teachers' own gender perceptions influence e-learning proficiency of female learners?
- c) What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools?

The objectives of this study were to establish:

- a) the e-learning teachers' gender perceptions;
- b) the extent to which teachers' own gender perceptions influence e-learning proficiency of female learners; and
- c) factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape Secondary schools.

7.2 Research conclusions

In essence, five main conclusions arise from the findings. Firstly, the teachers' gender perceptions are highly influenced by their patriarchal backgrounds. Secondly, the afore-mentioned gender perceptions are carried over to the

schools and negatively affect e-learning proficiency of female learners. Thirdly, the e-learning venture, although very noble in its objectives, does not benefit female learners since a myriad of negative gender perceptions from the male learners, teachers, society and parents prevents female learners from reaping the benefits of technology.

Fourthly, the lack of support for teachers from the Department of Basic Education causes apathy that breeds negative perceptions towards technology from the teachers. Lastly, the evident gap between the Constitution, the Department of Education policies and the traditional leadership gender perceptions causes the schools in rural areas to lean towards patriarchy, rather than towards transparent and fair governance for female learners.

At the outset of the research, three questions were posed which guided the study. These have been answered implicitly in the discussions in the preceding chapter. As the study unfolded, a fourth question was asked in order to interrogate how theory that the researcher engaged with could assist in framing conclusions and recommendations for this study. In the next section the research questions are addressed explicitly.

The first question asks:

7.2.1 What are the e-learning teachers' gender perceptions?

Explicit responses for the first questions are that in this study, gender perceptions of teachers were determined from the following contexts: a) the teachers' home backgrounds, b) the teachers' interaction with learners of different genders in the e-learning classroom, c) the teachers' delivery of the curriculum in view of their perceptions of vocational choices for male learners and female learners, and d) the teachers' perceptions regarding school based gender-violence, particularly in the e-learning classroom. The above-mentioned origins of teacher perceptions will now be discussed below.

7.2.1.1 Teachers' gender perceptions based on home backgrounds

From this study's interview responses from interviews with teachers, it is clear that all the teachers' patriarchal backgrounds have shaped their gender

perceptions. From the study, it is also clear that the teachers have been conditioned to believe that females do not question male superiority. Such unquestioned female subordination is evident in the resigned manner where most teachers indicate (some proudly so) that the patriarchal status quo of male superiority is the preferred norm as it has a solid, unchangeable history. The aforementioned male dominance gender perception is also evident in the manner in which the teachers allow male learners a level of superiority by making them 'teach' female learners in the e-learning classroom and dominate over the female learners to the point of bullying them.

Another teachers' gender perception issue that is indicative of the teachers' backgrounds is that of gender differentiation and stereotypes. The teachers' perceptions are that female learners and male learners have societally prescribed set gender roles and boundaries which they are required and enforced to adhere to. In this study, the teachers showed their discomfort once these boundaries are crossed by either gender. For example, the teachers perceive and react negatively when a female learner dresses (g-strings and school grey pants) in a manner that challenges the societal prescriptions of how a Xhosa girl-child should dress. The teachers perceive the female learners' unconventional dress sense as a violation and disrespect to male teachers and male learners, and some teachers view such behaviour of female learners as justifying being treated as sex objects by male learners.

Moreover, the teachers, through their gender perceptions based on their background, transfer their personal socialization experience that has been very deeply entrenched in role differentiation by promoting gender differentiation and gender stereotypes in the schools. Almost all teachers perceive technology to be a wasted project on female learners and do not take female learners seriously.

Another issue that reflects teachers' gender perception based on their backgrounds is cultural domination. In the schools, all the teachers perceive the Xhosa culture as a determinant of structured gender roles wherein the male is mostly dominant while the female is subservient. Such recognition of culture in gender roles and gender positions is evident in the accepted disrespect that is shown by newly initiated male learners to female teachers where the new

initiates are above reproach by the female teachers. In addition, culturally engineered gender perceptions are indicated in the unconditional acceptance of rituals such as forced marriages, polygamy, finger cutting and labial stretching as a norm which has been cited by the teachers as contributing factors to female dropouts in their schools.

From the above, it is therefore evident that the Xhosa e-learning teachers' patriarchal and culturally determined backgrounds contribute enormously to their gender perceptions. Such perceptions cause the female learners to feel and behave as subordinates. It is still evident that male and female stereotypes keep females in subservient positions through culturally determined beliefs, myths and rituals. Furthermore, it is also clear that males cling to power roles providing them with more rights and privileges over females as automatically claimed by patriarchal beliefs. Such male superiority is disseminated to the e-learning classroom through the school culture. These teacher perceptions result in the female learners being put-off and discouraged to attend the e-learning classes in such a harsh and unsupportive environment.

7.2.1.2 Teachers' favouritism of male over female learners

From this study's responses pertaining to teachers' interaction with learners in the e-learning classroom, it is clear that all the teachers have different gender-specified behavioural expectations for female learners and male learners in the manner in which they favour male learners more than female learners. Such favouritism is evident in the contradicting gender-role expectations where the teachers require female learners to be quiet, yet view them as being passive and lazy when they are being quiet. In addition, the teachers talk and engage verbally with male learners more than female learners and perceive male learners as the ones who show model behaviour that female learners can attempt to emulate in the e-learning classroom.

From the afore-mentioned cited examples, the teachers' gender perceptions promote male learners' domination by giving the male learners positive feedback that they do not give to the female learners, making the male learners teach female learners in the e-learning classroom, and not intervening in cases where the male learners harass and bully female learners. Instead, some

teachers perceive the female learners as responsible for the bullying and harassment that they get from male learners.

It is also clear from the above perceptions that the teachers interact differently with female learners than male learners, which conditions female learners not to question male dominance and superiority. This favouritism results in female learners perceiving male learners to naturally excel in technology. Therefore, male learners are perceived by teachers and learners in general to be of higher intellect technology. The latter gender perceptions place limitations on female learners' abilities and self-confidence in the e-learning classroom, resulting in these learners discontinuing their attendance of e-learning classes. Thus female learners opt to rather submit to the traditional pressures of 'perceived womanhood' as dictated by patriarchy.

7.2.1.3 Gender perceptions evident in the teachers' delivery of the curriculum

In this study, teachers perceive male learners to be good with technology and perceive female learners to not be 'useless' or unsuitable with technology. The afore-mentioned gender perceptions of the teachers are based on their traditionally held gender stereotypes of female and male abilities of public realms for males and private realms for females. As a result of the teachers' gender perceptions of male/female abilities, the teachers perceive the computer initiative as a 'wasted project' for female learners and do not support female learners to catch up with the syllabus. Therefore, teachers' perceptions of male learners' and female learners' abilities have been shown to promote gender stereotypes and male superiority in the schools in this study.

Furthermore, teachers perceive vocational choices to be strictly male or female engineered, and, as a result, in the schools in this study male learners and female learners are mostly limited to traditionally determined male dominated subjects and vocations. The afore-mentioned limitation of learners to traditionally male dominated subjects is indicative of the discriminatory manner in which the curriculum is implemented, especially for female learners. To qualify the above statement, such a limitation in terms of subject choices has

detrimental implications due to the limited career choices it affords the female learners.

The teachers' gender perceptions with regards to gender abilities and vocational choices, therefore, are indicative of the fact that the curriculum (whether hidden, academic or physical) is implemented in a manner that supports gender differentiation.

From the above, it is clear that teachers limit the female learners to private realms such as choosing subjects and vocations that are traditionally known as feminine by causing anxiety to many female learners. Such female learners would prefer to venture into traditionally male subjects/vocations but are prohibited to do so due to cultural taboos against females venturing into public realms. Their anxiety is exacerbated by the teachers who discriminate against and ostracize female learners who excel in subjects that are considered "male" such as technology. It also appears as if female learners are being socialized into believing that computers are meant for males only.

On the other hand, male learners are encouraged by teachers to explore subjects and vocations that are traditionally know as suitable for males. It is therefore clear that the teachers' gender perceptions promote male learners' superior attitude towards female learners in the e-learning classroom. Such a superior attitude is evidenced by the disrespect, bullying, harassment, violence and the perception that female learners are of lesser intellect with regards to technology directed by male learners towards female learners. This results in female learners experiencing feelings of apprehension, powerlessness and isolation which probably cause their fear of backlash from peers, teachers, and society.

7.2.1.4 Teachers' perceptions of school based gender-violence in the e-learning classroom

The teachers are reported to perceive the gender based violence that occurs in the schools and the e-learning classroom as acceptable. Such violations to female learners' rights are shouting from the male learners, sexist remarks from the male learners and male teachers, being bullied to give up fast computers, being sworn at by male learners when they sweep the e-learning classroom in

their presence and being given corporal punishment by the teachers for not cleaning the e-learning classroom. Such violence is viewed by the female learners as demotivating and demeaning and makes them disinterested to attend e-learning classes.

From the above it therefore appears that gender-based violence is accepted by the teacher as the norm, which is also justified through culture. On the other hand, such gender violence is seen as a violation by the female learners and affects their performance negatively in the e-learning classroom. Moreover, female learners are vulnerable to sexual harassment and violence in most schools situated in patriarchal societies, and the male learners' use of violence in schools to exert their power over female learners discourages female learners from attending the e-learning classes.

The discussion proceeds to the second question below which asks:

7.2.2 To what extent do the teachers' own gender perceptions influence proficiency of female learners in e-learning classes?

Firstly, due to the aforementioned gender differentiation, teachers treat female learners and male learners differently, and in most cases seem to favour and support the male learners more than female learners. The findings of this study are that the gender differentiation affects the female learners negatively and results in the female learners being perceived as inferior to males, exposed to gender stereotypes, dominated, oppressed through harassment and violence, abused and discriminated against. The negative gender perceptions of teachers are reported to be causing the female learners to lose interest in the e-learning classroom, and this leads to the female learners' decreased competency in e-learning.

Secondly, teachers perceive gender differentiation as a norm as indicated by the manner in which they allocate chores in the schools. Female learners are given roles of cleaning the e-learning lab more than being given access to the computers, and they are punished if they do not clean the computers on time. Such role allocation is reported to make the female learners feel that they are merely cleaners and are not entitled to use the e-learning classroom.

Thirdly, teachers perceive male learners to be naturally better than female learners in e-learning. Such a perception is evident in the favouritism that the teachers show towards male learners in the e-learning class. As a result of such a perception, male learners are encouraged and given more support while female learners are discouraged by the teachers through stereotypical comments regarding their technological abilities. In most cases, teachers give leadership roles in the e-learning classroom to male learners by giving the male learners the responsibility of assisting the female learners. The preferential leadership recognition is reported to cause distress to female learners as the male learners are abusive, impatient and shout at female learners for being lazy and slow.

Fourthly, teachers' gender perceptions that are based on sexist comments also affect the female learners' performance in the e-learning class. Some of the comments from the teachers are that female learners use the e-learning classroom as a waiting room for marriage, female learners are useless in computers, female learners should rather take softer subjects that will not break their pretty heads, female learners should behave like ladies and keep quiet in the e-learning classroom, female learners pretend to be slow in computers so as not to appear clever since a clever girl is unattractive, and that female learners like to ensnare males through their female advances and then scream 'rape'.

Fifthly, teachers perceive traditionally male subjects (such as Mathematics, Science and Technology) and vocations unsuitable for female learners. As a result of such a perception, the teachers are reported to continuously make comments that imply that female learners should not be in the e-learning classroom because of their femininity. As a result of such comments, it is reported that the female learners see themselves as incapable of succeeding in learning that involves technology and drop out of the e-learning classroom.

From all these gender perceptions of teachers, it is clear that the teachers' perceptions negatively affect the female learners' lack of proficiency in computer skills. This effect causes female learners to feel vulnerable and unwanted in the e-learning classroom due to harassment and violence from male learners.

Lastly, the teachers' gender perceptions promote female learners' inferiority and male learners' superiority complexes and are also influential in perpetuating gender stereotypes in the e-learning classroom. All of the above discourage female learners from attending the e-learning classroom, thereby diminishing their chances of attaining the necessary technology skills required for gaining economic freedom.

The discussion proceeds to the third question below which asks:

7.2.3 What are the factors that influence the e-learning proficiency of female learners in six rural and semi-rural Eastern Cape schools?

From the findings of the study, a number of factors seem to cause lack of proficiency in computers in female learners in six rural Eastern Cape Secondary schools. The most common factors reported to be causing lack of proficiency in female learners' computer skills were: the e-learning teachers' favouritism of male over female learners (as discussed in the second question above); curriculum offering dictated by gender perceptions (as discussed in the second question above); Lack of a supportive e-learning environment for female learners; and lack of peer support for female learners. The last two factors are discussed below:

7.2.3.1 Lack of peer support for female learners

Findings of this study show that male learners in the e-learning class perceive female learners as inferior, and such a perception is prevalent in the e-learning classroom. These male learners seem to hold traditional perceptions of gender roles wherein they view themselves as having power and status by virtue of their masculinity, and female learners accept such a view. The above acceptance is evident in the female learners' responses where they view male learners as naturally clever and able to be proficient in computers more than female learners. These perceptions and attitudes manifest themselves in the behaviour of the learners towards one other in a number of ways. The male learners engage in hegemonic masculinity practices both in the e-classrooms and schools in general. Examples of such practices are the sexist comments that male learners make towards female learners' menstruation, bullying female

learners to get the best computers and the best seat in the lab, shouting at the female learners in the computer lab and demeaning them in the process.

Secondly, male learners dominate the classroom, compete for leadership roles and seize power and take over in the e-learning classroom. Additionally, male learners abuse cultural myths to dominate female learners sexually and financially by demanding a share in the child support grant whenever they impregnate female learners.

On the other hand, female learners are acculturated into powerless positions where they are also often the victims of sexual harassment and violence from their male peers in the e-learning class. As a result of male learners' negative gender perceptions, female learners detest e-learning classes which they avoid by dropping out of school or performing badly in technology.

From the discussion of male learners' gendered perceptions, it appears as if male learners' gender perceptions and the manner in which they treat female learners as subordinates and second class citizens in the e-learning classroom contribute to female learners' decreased confidence. In addition, the way in which male learners ridicule female learners publicly leads to latter's feelings of self-doubt and feelings of inferiority, all of which discourage the female learners from attending the e-learning classes.

Moreover, cultural and biological myths such as using female learners for cleansing of sperms of the male initiates sometimes results in unwanted pregnancies that result in female learners dropping out of school and the e-learning class. Lastly, male learners perceive female learners as objects to be exploited financially by demanding and expecting their portion of the government child support grant (SASSA grant) from mothers of their children.

7.2.3.2 Lack of a supportive e-learning environment for female learners

According to the findings of this study, families and teachers create an unsupportive e-learning environment for the female learners. Firstly, it is reported by the learners that their families support male learners more than female learners towards using computers for e-learning and to venture into

technology-based careers due to the traditional gender perceptions that most of these families have. The perception encourages male learners to perform better than female learners in the e-learning classroom due to the support and influence that they receive at home. The implications of the families' gender perceptions imply that from home female learners have to put up with social constructions that portray females as having less intellectual ability than males.

Prolonged male dominance ultimately causes female learners to develop feelings of powerlessness, anger, alienation, oppression and discrimination resulting in them dropping out of the e-learning classes. Dropping out of e-learning classes prohibits female learners from participation in the economic sphere, rendering them powerless and ultimately dependent on male support for their survival.

Another issue related to an unsupportive e-learning environment for female learners is that of violence in the e-learning classroom (as discussed in 7.2.3.1 above). Due to such violence, female learners often find the e-learning classroom to be a very harsh environment and would rather drop out and attend other classes or attend initiation school ceremonies. Moreover, it is evident that the female learners feel unprotected and unsafe against harassment and violence in schools, particularly in the e-learning classrooms.

7.2.4 How can scholarly literature inform gendered perceptions of e-learning from a critical pedagogy and feminist perspectives?

By addressing this question, the researcher sought to explore whether theories that emerged in the course of this study could be useful to determine the direction that e-learning can take to promote success for female learners in rural and semi-rural schools. In addition, such information was needed in order to inform e-learning and e-education initiatives to add new insights and further development of such initiatives. To answer this question, the researcher referred to arguments from this study's frameworks: critical pedagogy, socio-constructivism, and feminism; these are discussed below. These frameworks suggest that gender perceptions imply different approaches to achieving female learners' success in e-learning.

7.2.4.1 Critical pedagogy

According to critical pedagogy, the greatest single barrier against the prospect of liberation in education is an ingrained, fatalistic belief in the inevitability and necessity of an unjust status quo (Ralphe, 2011). It is, therefore, necessary to change the perceptions of futility in the female learners and the e-learning teachers.

According to the literature study engaged by the researcher, critical pedagogy agrees with liberal feminism that, ideally, there should be equal access of male and female learners to all school resources in order to encourage equal chances of academic success. This entails ensuring that girls have as much access as boys of computers in the e-learning classroom. Furthermore, critical pedagogy insists on curricula and examinations to be developed to address the needs of all learners equally (Kincheloe, 2008). The implications for this study would therefore be that the whole curriculum (e-learning classroom in the case of this study) be re-examined and reconstructed to be relevant to female learners as well as male learners. Kincheloe (2008) also favours a change in the role of the student, regardless of gender, from object to active, critical subject. In doing so, Kincheloe (2008) suggests that students undergo a struggle for ownership of themselves. Students have previously been lulled into a sense of complacency by the circumstances of everyday life, and that through the processes of the classroom, they can begin to envision and strive for something different for themselves (ibid).

7.2.4.2 Socio-constructivism

According to socio-constructivism, successful learning can only take place as a collaborative process (Muhuro, 2009) which entails a change of role on the teacher's part. Hicks (2004) suggests that the role of the teacher is critical to the process of academic success, and students need to be helped by teachers to separate themselves from unconditional acceptance of the conditions of their own existence. Once this separation is achieved, then students may be prepared for critical re-entry into an examination of everyday life (ibid). An e-learning classroom environment that can achieve such liberating intent has the

potential to create students who are able to assume more personal responsibility in class.

One important way in which Giroux (2008) suggests such change in student academic performance is through distinction between a *language of critique* and a *language of possibility*. This author emphasizes that both are essential in the pursuit of social justice, and, therefore, making female learners aware of their strengths in e-learning would address this issue.

7.2.4.3 Equality feminism

As discussed in Chapter 2, according to Eisenhart and Finkel (2001), equality feminism argues that males and females are equal, and societies need to ensure such equality in creating more access to females to enter into historically male arenas. Based on the above argument, in an e-learning programme guided by equality feminism, interventions would have to aim to change the image of female learners' abilities to succeed. Teachers would have to sensitise female learners about their equal abilities to engage in deep level technological inquiry and possibly venture into the field of technology (Sinnes, 2004).

Within communities, Sinnes (2004) suggests the need to reduce development of different interests and attitudes amongst boy and girl children. One way of doing this could be to focus on giving girl and boy children similar experiences as they grow up (ibid). Giving girls and boys toys that are traditionally given to the other sex would be one way of trying to break down traditional gender barriers. In the context of this study, it would also be important to avoid discrimination caused by placing girl and boy children in traditional gendered roles; girl and boy children should be encouraged to develop similarly without emphasising their gender. Manning (2010) adds that society, in general, could also avoid conveying stereotyped images of females in newspapers.

In order to avoid discriminatory practices of males and females, communities should, particularly in traditional and patriarchal societies, be sensitised to understanding the equal ability of males and females to engage in technology (Mabovula, 2004). This could be done through campaigns where female role models in technology careers are utilized in order to visualise the equal ability of females to pursue such careers (ibid).

7.2.4.4 Difference feminists

Nash (2000) explains that difference feminists claim that either by nature and/or through nurture, females have developed what society refers to as *feminine* or *female* characteristics whereby females' particular skills are recognised and acknowledged for their own values, separate from males'.

Based on the above argument, in a difference feminist e-learning classroom, the teacher would be expected to pay extra attention to females and make sure that their special interests and needs are catered for and, perhaps, devise strategies such as having groups divided by gender. It would also be important to sensitise the broader society regarding the special contributions of females to technology and the importance of recruiting more female learners to technology-based careers (Sinnes, 2004). In addition, e-learning programmes operating under the premises of difference feminism could benefit from following e-learning research communities given the evolving nature of technology. It would also be expected that such e-learning initiatives incorporate scientific e-learning research developed by females.

To accommodate differences in male and female learners' preferred learning strategies, e-learning teachers could organize classes in small group settings and try to develop a non-competitive environment (as against the gender competitive one evident in the findings of this study). Generally, such initiatives would try to link the e-learning classes to female learners' out of school experiences and interests and encourage them to acknowledge, appreciate and develop further their feminine interest and traits (Sinnes, 2004).

7.2.4.5 Postmodern and post-structural theories

According to Sinnes (2004), postmodern and post-structural feminist theories argue that all individuals are different in the manner that they interact, learn, and understand their environment, regardless of gender. E-learning programmes inspired by postmodern feminist theory would be expected to challenge the idea that female learners are united by biological gender and treat them with a 'one size fits all' approach. Such initiatives that acknowledge the difference between all individuals would be expected to encourage all learners (regardless of gender) to value their own experiences and interests and make them relevant to

learning through technology; this argument is supported by social constructivism (Vygotsky, 1994) (cf. 3.3). Furthermore, e-learning guided by the postmodern feminist understanding would be expected to enforce an increased awareness of marginalised groups irrespective of their gender and would not take for granted that learners have the same preferences and needs just because they have the same gender. Postmodernist feminism of education argues that such curricula and examinations should be gender-neutral and equally relevant to female and male learners (Manning, 2010).

Teaching material in a postmodern e-learning class would have to visualise the relations between technology and society and show how all knowledge is situated. An e-learning curriculum based on this understanding would be expected to put emphasis on visualizing the social, political, cultural and psychological dimensions of learning using technology.

Lastly, learners, teachers and communities would have to be educated about the social, political and gendered assumptions that underpin knowledge-production and how social context shapes all knowledge.

7.3 Implications of responses to research questions

In summation, the responses to the four research questions above imply that despite South Africa having a gender-friendly Constitution and legislation in place to ensure gender equality and equity, some societies, especially in rural and semi-rural areas, are still essentially patriarchal, and such patriarchy translates to schools. Findings of this study also show that gender perceptions of the patriarchal societies where the six schools are situated are determined by and steeped in traditional cultural rural gender-role stereotypes which negatively influence female learners' e-learning proficiency.

Implications for the 2016 planned phase of the Walter Sisulu University computer skills project are: Inclusion of a programme to sensitise female learners about their equal abilities to engage in e-learning and possibly venture into Information Technology careers. Furthermore, the project could include a gender reform programme in e-learning operating under the premises of equality feminism which could focus on removing existing gender biases and practices

discriminating against female learners. In this regard, it would be important to develop gender neutral education material based on the postmodernist feminist approaches to education. This could be done either by removing all references to gender, refer equally to the two genders, or challenge traditional gender roles in the software used for e-learning. It would also be important to avoid visuals that portray males in active and females in passive positions.

Curricula and teaching materials would have to accommodate both female and learners' experiences and interests equally without emphasising one gender over the other. Great care would also have to be taken in curriculum and teaching material development not to convey stereotyped images of males and females. The implications of violence in schools would be a more visible and practical collaboration between the Department of Basic Education and the South African Police Services.

7.4 The study's contribution to new knowledge

This research study has contributed to the body of scholarship in terms of context, methodology and theoretically. This contribution results from the exploratory research question asked by this research study (1.4) and the interpretations made. These contributions are elaborated below.

7.4.1 Contextual contribution

This research study has contributed to creating a deeper awareness of gender perceptions and how these affect e-learning proficiency of female learners through scholarly engagement with critical pedagogy, feminism and constructivism, including scholarly debates on patriarchy, pedagogy and socialization constructs. In addition, this study created space for the perspectives of both female and male teachers and female and male learners and, therefore, brought awareness of gender inequalities within e-learning classrooms in rural and semi-rural environments.

With regard to society, this research study has revealed the lived experience of gender discrimination based on gender perceptions as evidence of some of the dominations of female teachers and female learners. From a pedagogical

stance, this research study contributes to a deeper understanding of the hidden curriculum concept to identify the shortcomings of e-learning implementation in rural and semi-rural schools.

This is a contribution not only to the mainstream school curriculum but also other forms of curriculum such as higher education and training curricula where pre-service teachers may engage with gender topics. This is important because transformative curriculum development cannot take place in isolation from interaction within and between society and curriculum.

7.4.2 Methodological contribution

Narrative enquiry, as a research method, was employed as the dominant methodology in this research study because of the QUALI-quantitative (Mouton, 2010) nature of this study. In addition, it was used due to its potential to elicit the experiences of young people, especially when researching uncomfortable and sensitive topics such as gender. In this study, narrative enquiry added value as it will be utilized in Phase II of the WSU project (Centre for Learning and Teaching report, 2011) planned to resume in 2016. This is because the initial project utilized questionnaires only, and the afore-mentioned report recommended the use of interviews to elicit narratives to assist the project in order to determine the reasons behind female learners' performance that was lower than that of male learners in the project. Inclusion of narrative enquiry encouraged the participants to engage in personal reflection on experiences that informed their gender perceptions, which are beneficial to the future plans of the afore-mentioned project.

7.4.3 Contribution to the discipline

Critical theory of pedagogy is a theory that serves to critically take a position regarding equality in schools. This theory acknowledges and fights against injustice regarding: human rights, knowledge and skills, values, beliefs and attitudes in the schooling system. Within this stance, gender perceptions and their impact on female learners' e-learning proficiency were challenged, debated and critiqued. This debate included other factors that affected female learners' e-learning proficiency (*cf.* 3.3.1)

The hegemonic undertones of gender perceptions in schools and their inherent power were engaged in this study within the framework of critical theory of pedagogy espoused by critical theorists.

Critical theory of pedagogy used in this study, coupled with e-learning research, served to explore new knowledge in order to recognise and embrace the complexities of gender perceptions within the context of e-learning.

7.5 Limitations of the study

This research study collected narratives from participants in one township school, two rural schools and one semi-rural school. It can be argued that a limitation of the research study is that research environments were not balanced, and rural schools were prevalent in the sample. However, these environments did form part of the sample in the WSU project (Centre for Learning & Teaching report, 2011) on which this research study was based. Furthermore, diverse perspectives were elicited in this study because of the participants' diverse socio-economic, language, religious and cultural backgrounds.

7.6 Recommendations which arise from the research

The recommendations of this study are based on glaring truths, and one of the most unpleasant truths that was unearthed in this study is that, despite South Africa's claim to be a progressive society, gender discrimination that negatively affects e-learning of female learners is rooted deeply in this discrimination, specifically in some rural and semi-rural schools. From the evidence that is available, school managers and teachers continue to demonstrate traditional attitudes in relation to male learners and female learners in the context of school structures, organisation, curricula, practices and, importantly, in e-learning classes. Therefore, recommendations made below are both legislative and non-legislative in nature in order to address the afore-mentioned gender discrimination with regards to e-learning.

7.6.1 Legislative recommendations

The following are recommended for addressing culturally determined abusive activities such as stretching of labia, forced marriages and cutting off of fingers of female learners that influences their proficiency in e-learning:

7.6.1.1 The Bill of Human Rights (best interest of the child principle in section 28) should clearly document that the Rights of the Child supersede those of the cultural and religious rights. The reason for this recommendation is that the Constitution gives no indication whether any other rights supersede cultural rights since the fundamental rights are not ranked;

7.6.1.2 Existing legislation, specifically the Recognition of Customary Marriages Act and the Children's Act, should be amended to specifically include references to the female abuse activities and their penalties. This recommendation is made so as to resolve the existing conflict between the rights afforded by the Bill of Human Rights that appears in the Constitution and the cultural rights that also appear in the same Constitution;

7.6.1.3 The South African Law Reform Commission should fast-forward its mandate to criminalize the afore-mentioned gender-abusive actions, especially in cases where they affect the learning of female learners;

7.6.1.4 A statute should be established in order to criminalize gender-abusive actions;

7.6.1.5 School and community gender legislation and policies should be accompanied by comprehensive strategies, beginning with awareness-raising programmes for all stakeholders in the education system; policy makers, ministry personnel, school authorities, teachers, parents and learners. The recommendation is made because legislation in itself does not guarantee *de facto* gender equality and needs to be accompanied by fully supported and monitored strategies, particularly for e-learning;

7.6.1.6 Gender-based bullying, harassment and violence in schools and classrooms should be criminalized by a strong coordination between the South

African Police Services and the Department of Basic Education. This can be done through gender sensitized community policing structures;

7.6.1.7 The following special committees or groups should be institutionalized in community and school settings so as to promote gender friendly and safe environments for learners, namely: a gender interest committee or group with a qualified gender focal person; a sexual harassment committee; and a child abuse committee;

7.6.1.8 All education and e-education policies, programmes and interventions should be gender-sensitive. Such gender sensitivity should be targeted at strategic levels using various means such as gender quotas, non-discriminatory computer access across genders and other initiatives to enhance the application of gender equality principles that cut across gender segregation in the e-learning classroom and schools in general;

7.6.1.9 The Department of Basic Education's legal (White Paper on e-education, 2004) documents should explicitly reflect the South African gender equality laws to promote harmonisation of national laws towards gender sensitive e-education;

7.6.1.10 Equality in e-education should be supported by strategic lobbying by the Department of Basic Education to change negative institutional (schools and communities) attitudes to gender equality and gender stereotypes in education;

7.6.1.11 The Social Development Department should develop legislation that enforces the South African Social Security Agency (SASSA) to liaise with, for example, local shops to supply food parcels and baby merchandise to school-going mothers *in lieu* of the cash Child Support grant: this arrangement would discourage young school-going fathers from accessing grant finance meant for infants;

7.6.1.12 Governmental and non-governmental organizations should play a pivotal role in promoting gender equality. They need to collaborate and cooperate with schools and communities so as to meet the challenges of minimizing gender discrimination against technology and promoting gender equality in the e-learning classroom; and

7.6.1.13 The South African Schools Act should legislate against the hidden curriculum by clearly defining it and spelling out consequences to teachers that perpetuate it. Mechanisms to counter the hidden curriculum's negative effects should be included in school gender policies, practices and school culture.

7.6.2 Non-legislative recommendations

Below are recommendations that are non-legislative for the Department of Basic Education to implement. Since responses to the 2nd and 3rd research questions pointed to a number of factors that negatively influence female learners' computer skills, the recommendations below target some of those factors specifically. The afore-mentioned factors are: teacher training, gender perceptions on technology-related subjects and vocational choices.

7.6.2.1 Teacher training

- All pre-service training courses for teachers should include, as a mandatory element of the course, modules on gender equality with regards to technology and how to implement gender-sensitive e-learning as an essential requirement of good teaching;
- Student teachers should be given opportunities in pre-service training to examine their own values and beliefs in the context of their socialisation and should be challenged to assess the possible impact of these on their future teaching practices and interactions with learners, particularly in the e-learning context;
- As best practice, teachers should be provided with a set of specific tools for self-evaluation and indicators of gender sensitive e-learning and teaching; and
- The Department of Basic Education should only employ teachers who are qualified, trained and competent in gender sensitive e-learning.

7.6.2.2 Gender perceptions on technology-related subjects

- Female learners as well as male learners should be given equal access to all of the school's technology facilities and should be equally encouraged to take technology-related subjects;
- Initiatives such as female learners in Technology events should be introduced whereby companies, businesses, educational and research institutions as well as government agencies invite female learners to visit their workplaces to learn about careers in Science and Technology; and
- Female learners should be exposed and introduced to female role models who are in the fields that are Mathematics, Science, and Technology based.

7.6.2.3 Textbooks and the curriculum

- Teachers should be made aware of the need to use e-learning textbooks and materials where roles undertaken by females and males interchange and vary;
- Teachers should be encouraged to advocate for gender-sensitive teaching materials in e-learning classes which portray females and males in non-stereotypical roles;
- Gender roles and expectations reflected by written text, pictures and software used in the e-learning classroom should be gender-sensitive to promote the concept of gender equality and to counteract the hidden curriculum issue; and
- Teachers should be made aware that the messages that they convey to learners through the hidden curriculum influence the learners' self-perceptions as well as their self-confidence negatively, particularly in the e-learning classes.

7.6.2.4 Parents' gender perceptions

- Parents should be made aware of the obligations of schools in relation to compliance with gender-based legislation;
- School-parent partnership should be strengthened to identify and address gender issues in homes and in schools. Gender awareness training must therefore be provided for parents, teachers, staff, administrators, and

local officials together by the Department of Basic Education in collaboration with local NGOs, particularly to educate them on the importance of technology for female learners; and

- Parents should be made aware of the consequences of gender role stereotyping and how it can affect the holistic development of female learners in the e-learning class and limit their life chances and personal fulfilment.

7.6.2.5 The school environment

- Relevant policies and procedures should be institutionalized in the schools in relation to allocation of technology resources for gender equity processes;
- The academic delivery using technology including teaching methodologies, teaching and learning materials, classroom interaction and management of academic processes should be gender-responsive; and
- School organizational change should be institutionalized by promoting gender balanced teachers and gender sensitive governance structures which value female and male working styles equally.

7.6.2.6 Language

- Gender-neutral language should be promoted at all levels and throughout the schools for learners and teachers; and
- Female teachers should avoid the use of the language of respect (*hlonipha*) in their e-learning classes since it compromises the quality of learning of learners.

7.6.2.7 Learner representative committees

Learner councils and bodies should be utilized to provide female learners with the space to highlight issues of gender inequality and gender stereotyping (among other forms of stereotyping and inequality) and to contribute to the process of addressing these, particularly in the e-learning classroom.

7.6.2.8 Monitoring of gender sensitive e-learning in schools

- Appointment of a highly qualified gender focal person in the Eastern Cape Department of Basic Education should be done as a matter of urgency;
- Gender sensitivity progress should be annually reviewed by gender experts, and steps should be taken to sustain its progress; and
- Gender audit of schools should be carried out by gender experts to review curriculum, policies, programmes, interventions.

7.7 Closing remarks

All e-education stakeholders have a responsibility to promote equality of opportunity and equality of outcomes for all pupils. In relation to gender equality, while progress has been made by way of a democratic Constitution and in national educational policies, South Africa has not developed comprehensive strategies which target all stakeholders and focus on all aspects of school life.

The researcher concludes by saying that the issues associated with gender stereotyping in e-education need to become more visible in South Africa's technology development policies. Comprehensive legal strategies, therefore, are required to counter gender stereotyping and sexism which obstinately persist despite a range of measures in South Africa. Such strategies should consequently include robust monitoring and evaluation, particularly in e-learning and e-education. Urgent action is required because the negative effects of gender perceptions on the e-learning proficiency of female learners in rural and semi-rural schools are too serious to await future deliberations in the education system.

7.8 Recommendations for future research

Three studies are recommended for future research, namely:

7.8.1 A study that leads to the development of a model towards bridging the e-learning proficiency gap of female learners can be conducted when the grey area in the Constitution is cleared regarding whether or not the Rights of the Child supersede those of the cultural and religious rights.

7.8.2 Research regarding the development of Afro-centric e-learning computer games targeted specifically for the benefit of the African girl-child should be undertaken. These computer games could focus on the inclusion of female role-models who are heads of families, successful in their careers, and demystify female gender-stereotype myths.

7.8.3 Research can be conducted to determine whether gender focal persons in other South African provinces in rural and semi-rural contexts do contribute to gender-sensitive and supportive e-education. The reason for this recommendation is that the absence of the gender focal person in the Eastern Cape Department of Basic Education has been cited as an impediment towards gender sensitive e-education in the province.

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9. LIST OF APPENDICES

APPENDIX A: LEARNER QUESTIONNAIRES

Dear Learner,

Thank you for agreeing to participate in this survey. Kindly complete all questions as honestly as possible because there are no right and wrong answers. The questionnaire is anonymous, and strict confidentiality is promised. You are therefore not required to write your name.

SECTION A: BIOGRAPHICAL DATA

PLEASE NOTE: In all sections, please place an “X” in the appropriate box. The questions that require you to explain further are the only ones where you may write your own responses in the spaces provided.

A1	Gender	Male		Female	
A2	Age group	13 yrs or younger	14-15 yrs	16-17yrs	18 yrs or older
A3	Home Language	IsiXhosa	IsiZulu	English	Specify if any other:
A4	Person(s) who heads the home with whom you live	Father only	Mother only	Mother & Father	Specify if any other:
A5	Your school location:	Rural area	Township area	Informal settlement	Specify if any other:

A6. The field of work (if any) that the person mentioned in A4 above is in:

.....

SECTION B: USE OF COMPUTERS FOR LEARNING

When you participated in the Computer project in 2011:

B1	How often (per week) did you use the computers?	2 times	1
		More than 2 times	2
		Less than 2 times	3

B2	Do you think the time you spent on the computers was enough for you to learn what you were meant to learn?	Yes	1
		No	2

B3. If your answer to **B2** is "**No**", what reasons do you have or were given for not using the computer laboratory as much as you needed to?

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.....

B4	Before participating in this project, did you know how to use a computer?	Yes	1
		No	2

B5. If your answer to **B4** is "**No**", who taught you how to use the computers?

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.....

B6	During computer classes at school, did you do group work or did you always work as individuals?	Group work	1
		Individual	2
		Sometimes both group-work and sometimes individual	3

B7	If your answer to B6 above is group work , was this mixed gender (boys and girls) or was this mainly not mixed gender?	Mixed gender	1
		Non-mixed gender	2

B8	Did you find the other learners helpful whenever you needed assistance?	Yes	1
		No	2

B9	Whom did you find most helpful whenever you needed assistance?	Your teacher	1
		The boys	2
		The girls	3
		Everyone was equally helpful	4

B10. **ADDITIONAL COMMENTS:** Please comment on what you did not like about your computer classes:

B11. **ADDITIONAL COMMENTS:** Please comment on what you liked about your computer classes:

SECTION C: SOFTWARE CONTENT LEARNING EXPERIENCE

C1	In the final assessment of the project, did you score?	More than 50%	1
		Less than 50%	2

C2. Please share with us why you think you received that score or mark:

.....

PLEASE NOTE: Answer C3 only if you feel you could have performed better than you did.

C3. The following prevented me from scoring more points:	1	2	3	4	5
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
C3 (i) Difficulty in understanding the English language used in the software.					
C3 (ii) Difficulty in handling the mouse, typing, and so on due to lack of computer skills.					
C3 (iii) I did not take the e-learning experience seriously since I did not see how it linked to the subject.					
C3 (iv) The teacher did not encourage/emphasize good performance in e-learning.					
C3 (v) Software instructions were difficult to understand.					
C3 (vi) Speed timing and response time were difficult to manage.					
C3 (vii) There was limited access to the computers.					

C3 (viii) Technical-based learning is not really a girl's thing (where applicable)					
--	--	--	--	--	--

C4. ADDITIONAL COMMENTS: Please comment on any other factors which you feel might have prevented you from performing better than you did.

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SECTION D: E-LEARNING CLASSROOM & GENDER ISSUES

In the computer classroom:		1	2	3	4	5
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
D1	There is equal access to computers for both boys and girls					
D2	There is support given by the teacher to all learners equally, that is to boys and to girls					
D3	The teacher sometimes makes comments that point to boys being better at computers (or technical subjects) than girls					
D4	Girls sometimes make comments that point to boys being better at computers than girls					
D5	Boys sometimes make comments that point to boys being better at computers than girls					
D6	Both boys and girls are cooperative during the computer class					
D7	I am comfortable to ask for assistance from the teacher at any given time					
D8	I am comfortable to ask for assistance from the boys at any given time					
D9	The teacher gives good feedback, e.g. praise when I do well					
D10	The teacher makes us aware of the benefits of having computer skills					

SECTION E: TECHNOLOGY & GENDER ISSUES

E1	Do you think boys and girls have similar abilities to excel in computer skills?	Yes	1
		No	2

E2. Please explain your response to question **E1** and also share what influences your opinion.

.....

.....

.....

E3	Does your family encourage you to use computers for learning	Yes	1
		No	2

E4. If your answer to **E3** is "no", what reason(s) are you given by your family for discouraging you?

.....

.....

E5	Are you likely to register for Computer Applied Technology (CAT)?	Yes	1
		No	2

E6. If your answer is "yes" to question **E5**, who or what encourages you to register for CAT?

.....

.....

E7. If your answer is "no" to question **E5**, please share your reasons for not choosing to register for CAT.

.....

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E8	I am encouraged to use computers or any technology for learning because of the following support provided by the school:	1	2	3	4	5
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
i	Computers that are in good condition					
ii	Unlimited access to the computers					
iii	Available assistance whenever needed					
iv	Career guidance: preparation for a possible career in IT					
v	Assistance from the other learners					

E9. If you feel that there is no school support towards e-learning, what explanations (if any) were you given by teachers to explain the lack of support?

.....

.....

.....

E10	Would you consider a career in IT?	Yes	1
		No	2

E11. Please support your response to question **E10** above:

.....
.....

Thank you for participating in this survey! 😊

APPENDIX B: TEACHER INTERVIEW SCHEDULE

INTERVIEW 1

Interviewer: Researcher, Rose Masha

Interviewee A: E-learning teacher (female)

Interview Setting: Interview conducted in the computer laboratory during the school break-time. The school is in a rural area setting.

Interview questions

- a) Tell me a little about your background as a Xhosa woman, your childhood, and your career choice.
- b) As you have mentioned that life is not easy as a woman in the rural areas, what do you feel are the major challenges women face in rural areas today?
- c) How has this exclusion affected you and other women (including girls)?
- d) Were you ever subjected to forced marriage or was there a member of your family who was?
- e) Coming to other societal issues, what do you feel about the different roles assigned to boys and girls?
- f) Mam, since you said most men don't do many chores but drink all day, what this says to me is that the women seem to be doing most of the men's duties for the survival of the household, so what is it then than the men contribute to the household?
- g) So what you are saying is that you do not have a plan to prevent this from happening? How do your daughters feel about this?
- h) So are the schoolboys also brought up to see themselves as superior to girls and women in general?
- i) Are you then of the opinion that women cannot be in leadership roles?
- j) How about positions of Heads of Department in the school and making girls to be prefects?
- k) Coming to the classroom, does this mean then that the technology and science skills are not the best option to be offered girls?

INTERVIEW 2

Interviewer: Researcher, Rose Masha

Interviewee B: E-learning teacher (male)

Interview Setting: Interview conducted at teacher's office. The school is in a township area.

Interview questions

- a) When we were talking casually before the interview, you mentioned the word *patriarchy* and said you learnt it at College. Tell me more about your understanding of patriarchal societies?
- b) Let's talk about yourself... in what ways has this affected you?
- c) When you say you were taught this at young age, are you referring to your family, your friends and teachers?
- d) Do you then often expect women generally to carry on this spoiling that was done to you as you were growing up?
- e) How does this make you feel about this and how the generation of your male students treat girls?
- f) So with the background that you have and how you perceive women, tell me about how this plays a role in the way you treat girls in your school and e-learning class.
- g) So are you saying none of the girls in your school are ever going to be anything other than dropouts?
- h) Don't you think that maybe they are picking up this lost hope from the teachers and sort of lose hope of ever becoming anything better?
- i) I hear you saying it is what it is, what does this mean?
- j) Please explain how this post rape cleansing works.
- k) Let's link what you have told me with not allowing the girls in your office. How are these related?
- l) How do you feel about this?
- m) You seem to imply that your students would also come to your office with an agenda. Is this really true or is it a common belief in your community?

INTERVIEW 3

Interviewer: Researcher, Rose Masha

Interviewee C: E-learning teacher (female)

Interview Setting: Interview conducted at the teacher's class. The school is in an informal settlement area.

Interview questions

- a) Interviewer: Tell me about yourself, your life growing up in the informal settlement as a woman.
- b) How so?
- c) How has your background affected your relationship with either males or females?
- d) Oh and why do you say females are envious of you?
- e) Don't you think that females admire you?
- f) Let us bring the discussion to your classroom and the school situation. In the staffroom, how do you relate to the other staff members of different genders?
- g) In the other interview you told me that you were taught computers in College, compared to the other girls, you said caught on faster, and what caused this?
- h) In your community, what was expected of girls versus boys generally, and how is this different or similar with your learners.
- i) Interviewer: How is this different to the boys who always show their underwear like the music stars on tv?
- j) The culture part is interesting. What does it say about men from initiation school being respectful and respectable?
- k) When I came here to run the pilot questionnaire, I saw some of the boys in the brown initiation uniform being rude to girls, touching them inappropriately, and actually showing their underwear. Would you call that respectful and respectable?
- l) Could you please explain this win-win situation?

- m) Ok, so how does the baby of these learners survive if the girl gives most of the Child grant to the father of the child?
- n) Coming to the girls in your school, and the society that you describe, do you feel there is hope for them to be in leadership positions, be career women?

INTERVIEW 4

Interviewer: Researcher, Rose Masha

Interviewee D: E-learning teacher (female)

Interview Setting: Interview conducted at teacher's office. The school is in a rural area.

Interview questions

- a) Please tell me about yourself, growing up as a girl in Mdantsane.
- b) How did this affect your understanding of gender roles in society?
- c) What were the men doing to earn money?
- d) Given this background, what do you think about gender roles that society prescribed by your community?
- e) Did you experience any negative treatment from your male colleagues when you were a truck driver?
- f) Is that how you changed careers to become a teacher?
- g) Since you were in an almost violent situation, what is your opinion of male/female violence in schools and generally?
- h) Given all your background and experience, how do you then relate to boys and girls in your school?
- i) In the computer lab or classroom, do you find that the type of behaviour you expect is gender guided?
- j) And what about career or subject choices?

INTERVIEW 5

Interviewer: Researcher, Rose Masha

Interviewee E: E-learning teacher (female)

Interview Setting: Interview conducted at teacher's office. The school is in a rural area.

Interview questions

- a) Kindly share with me the type of background you grew up in.
- b) What gender-specific cultural issues from your past inform how you live your life presently?
- c) What other aspects of the society you grew up do you feel shapes the roles of women and men which you see in your learners?
- d) In the focus group interviews I had with the learners, they pointed out that they do not like to sit with girls that are on periods in the computer lab. Would this perhaps be the reason?
- e) So what you are saying is that this separation is common in the homes of your learners and it is somewhat carried into the school environment.
- f) Do you support this separation of female/male activities and ways of living? And do you think it affects how each gender performs in the e-learning classroom?
- g) Tell me about the chores that you give to girls and boys in the school?
- h) How do you relate to the boys and girls in your e-learning class?
- i) In what incidences in your e-learning class do you pick up this disrespect of girls from boys?
- j) How do you deal with these issues of male learners' disrespect towards female learners as a female teacher?

INTERVIEW 6

Interviewer: Researcher, Rose Masha

Interviewee: E-learning teacher (male)

Interview Setting: Interview conducted at teacher's office. The school is in an informal settlement area.

Interview questions

- a) Please tell me about your background with regards to how you were brought up and your schooling
- b) How did your parents relate to you and your female siblings?
- c) Let's talk about you... in what ways has this affected you in the way that you relate to females in general and your learners specifically?
- d) How has being in outside the country affected the way you relate to males and females?
- e) Please explain the female softness you have just mentioned?
- f) How do you feel about this and the way in which your male students treat girls?
- g) You mention that in your church you do not allow females to perform manly tasks. Please explain further.
- h) How then does your background female perception play plays a role in the way you treat girls in your school and e-learning class?
- i) Are you therefore implying that girls should not be attending the e-learning classes due to their gender?
- j) What do you think are other causes the girls not to perform well in the e-learning class?

APPENDIX C: LEARNER FOCUS GROUP DISCUSSION SCHEDULE

The respondents were requested to reflect and respond to the following questions:

1. Please share with us your perceptions of your e-learning experiences with regards to computer access, your peers, your teacher, your parents, your performance, and your school.
2. What does the concept “gender-sensitive” mean to you?
3. Let us discuss how you think differences between male learners and female learners (physical structure, attitude, family upbringing, roles, societal interactions, cultural) affect academic success between these genders especially in the male-dominated subjects and technology-based careers.

APPENDIX D: RECORD OF THE LEARNERS' PERFORMANCE IN 2011

The list of skills that the learners were assessed on as part of the e-learning initiative were:

- a) Basic English language grammar usage;
- b) Right and left click usage of the computer mouse;
- c) Creating and accessing files and folders in the computer;
- d) Using the keyboard for typing.

Participant number in the questionnaire admin. attendance register	Gender	School	% scored on Creating and Saving files	% scored on English Grammar exercises	% scored on Use of mouse	% scored for Typing	Average % combining all tasks
1	Female	school 1	21	23	absent	33	25,6
2	Female	school 1	23	28	absent	22	24,3
3	male	school 1	57	56	55	54	55,5
4	male	school 1	54	54	51	49	52
5	male	school 1	51	60	54	53	54,5
6	Female	school 1	24	34	31	37	31,5
7	Female	school 1	21	35	37	39	33

8	male	school 1	67	66	66	68	66,75
9	Female	school 1	34	31	44	44	38,25
10	Female	school 1	21	32	34	35	30,5
11	Female	school 1	37	23	0	0	15
12	Female	school 1	42	28	44	23	34,25
13	male	School 2	54	60	54	53	55,25
14	Female	school 2	23	19	absent	14	18,66667
15	male	school 2	67	66	54	54	60,25
16	Female	school 2	37	44	43	44	42
17	male	school 2	54	51	52	53	52,5
18	male	school 2	57	54	48	49	52
19	Female	school 2	34	38	38	40	37,5
20	male	school 2	56	54	55	59	56

21	Female	school 2	45	23	13	17	24,5
22	male	School 2	56	56	54	60	56,5
23	Female	school 2	31	23	21	absent	25
24	male	school 2	56	54	58	51	54,75
25	Female	school 2	34	38	30	23	31,25
26	Female	school 2	31	32	21	0	21
27	Female	school 2	13	25	11	absent	16,33333
28	Female	school 2	54	32	36	43	41,25
29	Female	school 2	23	45	16	11	23,75
30	Female	school 2	34	33	26	27	30
31	Female	School 2	31	30	30	23	28,5
32	male	school 2	45	50	57	59	52,75
33	male	school 2	55	56	51	49	52,75

34	male	school 2	59	60	61	47	56,75
35	Female	school 2	11	31	absent	19	20,33333
36	Female	school 2	12	34	33	21	25
37	male	school 2	54	55	47	59	53,75
38	male	school 2	56	54	54	50	53,5
39	male	school 2	59	56	54	51	55
40	Female	school 2	46	47	51	50	48,5
41	Female	school 2	35	34	19	32	30
42	male	school 2	52	46	57	53	52
43	male	school 2	43	58	57	50	52
44	Female	school 2	45	45	44	19	38,25
45	Female	school 3	32	12	36	absent	26,6
46	Female	school 3	45	34	33	29	35,25

47	Female	school 3	16	32	38	40	31,5
48	Female	school 3	19	32	30	26	26,75
49	Female	school 3	44	23	23	37	31,7
50	Female	school 3	34	45	44	32	38,7
51	Female	school 3	23	21	19	absent	21
52	male	school 3	56	66	60	61	60,7
53	male	school 3	55	55	43	54	51,7
54	male	school 3	59	57	50	44	52,5
55	Female	school 3	23	22	28	absent	24,3
56	male	school 3	56	54	55	53	54,5
57	Female	school 3	34	33	19	22	27
58	Female	school 3	27	27	29	30	28,2
59	Female	school 3	37	39	44	44	41

60	male	school 3	56	59	60	60	58,7
61	male	School 4	61	45	47	55	52
62	male	School 4	45	44	39	50	44,5
63	Female	school 4	34	33	36	35	34,5
64	male	school 4	45	57	57	56	53,7
65	Female	school 4	45	34	37	38	38,5
66	Female	school 4	44	46	23	34	36,7
67	Female	school 4	21	19	23	absent	21
68	Female	School 4	22	23	29	absent	24,6
69	male	school 4	67	66	56	54	60,7
70	male	school 4	54	53	51	50	52
71	male	school 4	55	59	50	51	53,7
72	male	school 4	56	57	59	52	56

73	Female	school 4	34	34	36	32	34
74	Female	school 4	12	18	34	absent	21,3
75	Female	school 4	23	34	37	37	32,7
76	Female	school 4	45	34	34	31	36
77	Female	school 4	32	21	21	22	24
78	male	school 4	65	55	54	50	56
79	Female	school 4	38	38	34	32	35,5
80	male	school 4	54	54	50	51	52,2
81	male	school 4	59	56	51	50	54
82	Female	school 4	44	43	29	29	36,2
83	male	school 4	59	56	57	57	57,2
84	Female	School 5	33	32	31	30	31,5
85	Female	school 5	34	33	19	21	26,7

86	Female	school 5	23	22	absent	14	19,6
87	Female	school 5	22	20	21	38	25,2
88	male	school 5	54	50	50	56	52,5
89	male	school 5	56	56	54	54	55
90	Female	School 5	43	37	36	36	38
91	male	school 5	56	55	54	53	54,5
92	male	school 5	60	59	57	56	58
93	Female	school 5	19	Absent	13	32	21,3
94	Female	school 5	25	32	18	33	27
95	Female	school 5	34	32	22	20	27
96	Female	school 5	32	34	20	32	29,5
97	Female	school 5	10	23	32	23	22
98	male	school 5	50	61	66	63	60

99	Female	School 6	13	34	23	25	23,7
100	Female	school 6	34	38	39	40	37,7
101	male	school 6	67	50	54	55	56,5
102	Female	school 6	34	45	23	23	31,2
103	Female	school 6	23	23	absent	19	21,6
104	male	School 6	56	57	56	56	56,2
105	Female	school 6	18	43	absent	absent	30,5
106	Female	school 6	23	42	23	34	30,5
107	Female	school 6	34	32	28	36	32,5
108	Female	school 6	34	38	29	37	34,5
109	Female	School 6	32	41	20	absent	31
110	male	school 6	54	55	58	59	56,5
111	male	school 6	56	51	50	51	52

112	male	school 6	50	50	54	55	52,2
113	male	school 6	56	55	57	59	56,7
114	Female	School 6	45	40	45	17	36,7
115	male	school 6	67	54	56	45	55,5
116	Female	school 6	34	38	45	40	39,2
117	male	school 6	33	31	20	23	26,7
118	male	school 6	21	19	23	22	21,2
119	Female	school 6	21	27	27	absent	25

APPENDIX E: DISCTRICT OFFICIAL INTERVIEW SCHEDULE

Interviewer: Researcher, Rose Masha

Interviewee D: E-learning teacher (female)

Interview Setting: Interview conducted at the Department of Basic Education provincial headquarters in Bhisho

Interview questions

1. What support is given to Eastern Cape teachers by the Provincial Department of Basic Education to implement gender sensitive e-learning?
2. What is your understanding of gender-sensitive learning?
3. Do you think implementation of gender-sensitive e-learning in Eastern Cape schools responds to the objectives of the White paper on e-education?
4. What structures are in place for monitoring and evaluation of gender-sensitive e-learning in Eastern Cape schools, particularly those in rural and semi-rural schools?

APPENDIX F: PARTICIPANT CONSENT FORM

I hereby agree to participate in research titled: “An investigation of the teachers’ gender perceptions and their impact on female learners’ computer skills proficiency in six Eastern Cape rural and semi-rural schools” conducted by Ms. R. Masha. I understand that I am participating freely without being forced to do so. I also understand that I can stop this exercise at any point should I not want to continue and that this decision will not, in any way, affect me negatively.

I understand that this is a research project whose purpose is not necessarily meant to benefit me personally.

I have received the telephone number and address of a person to contact should I need to speak about any issue which may arise in this interview.

I understand that this consent form will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.

.....

Signature of participant

Date:

I hereby agree to the tape recording of my participation in the study.

.....

Signature of participant

Date:

APPENDIX G: PARENT AND RESEARCHER DECLARATION FORMS

Declaration by parent /legal guardian

By signing below, I (name of parent/guardian) -----agree to allow my child (Name of child) ----- who is ----- years old, to take part in a research study entitled: An investigation of the teachers' gender perceptions and their impact on female learners' computer skills proficiency in six Eastern Cape rural and semi-rural schools.

I declare that:

I have read or had read to me this information and consent form; it is written in a language with which I am fluent and comfortable. If my child is older than 7 years, he/she must agree to take part in this study, and his/her PERMISSION must be recorded on this form.

I have had a chance to ask questions, and all my questions have been adequately answered. I understand that taking part in this study is voluntary, and I have not been forced to let my child take part in it. I may choose to withdraw my child from the study any time, and my child will not be penalised or prejudiced in any way. My child may be asked to leave the study before it has finished if the researcher feels it is in my child's best interest to do so.

Signed at (place) on date.....

.....

Signature of parent /legal guardian

Signature of witness

Declaration by the researcher

I (name) declare that:

- I explained the information in this document to.....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that s/he adequately understands all aspects of the research, as discussed above
- I did not use an interpreter

Signed at (place) on (date)

APPENDIX H: ETHICAL CLEARANCE TO CONDUCT THE STUDY



University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE

Certificate number: PAL011SMAS

Project title: An investigation into teachers' gender perceptions and their influence on female learners' e-learning proficiency in six rural Eastern Cape schools

Nature of Project: PHD

Principal Researcher: Rose Khanyisa Masha

Supervisor: Dr. Therza Palm-Forster

Co-supervisor: Dr. Ntombozuko Duku

On behalf of the University of Fort Hare's Research Ethics Committee (UREC), I hereby given ethical approval in respect of undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The researcher may therefore commence with the research as from the date of this certificate using the reference number indicated above.

Please note that the UREC must be informed immediately if:

- **Any material change in the conditions of or undertakings mentioned in the document**
- **Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research**

APPENDIX I: APPLICATION LETTER FOR CONDUCTING RESEARCH

23 Elfin Glen Road

Nahoon Valley

East London

5200

Dear Participant,

I humbly request you to participate in my PhD research which I will be conducting in your school. I am a student at the University of Fort Hare registered for her final year in the afore-mentioned study.

I would like you to assist me in the following during the school break or after school hours:

- a) Respond to questions that appear on the questionnaire; and/or
- b) Take part in interviews and group discussions.

The aim of the study in question is to collect data regarding the following:

- Teachers' gender perceptions, generally;
- Teachers' gender perceptions and their impact on the female learners' computer skills;
- The learners and teachers' perceptions on factors that they think prevent female learners from acquiring the necessary computer skills.

Given the nature and sensitivity of this study, confidentiality and anonymity is guaranteed. I would also like to highlight that participation in this study is voluntary. Kindly fill in the attached consent form and return it to the school principal.

Thank you in advance for your cooperation and assistance in my endeavour to improve education for female learners.

Yours in education service

R. Masha (Ms) -----

Cell:

082 770889

