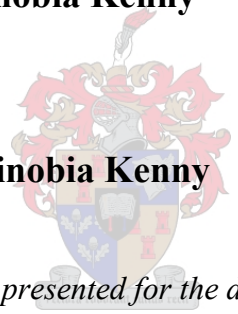
EXPLORING THE LIVED EXPERIENCES AND IDENTITIES OF 'COLOURED' WOMEN AS PROFESSIONAL MATHEMATICS EDUCATORS IN HIGHER EDUCATION

Sinobia Kenny



Sinobia Kenny

Dissertation presented for the degree of
Doctor of Philosophy
in the
Faculty of Education at Stellenbosch University

Supervisor: Prof Nuraan Davids

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

7 August 2020

Sinobia Kenny

ABSTRACT

‘Coloured’, as a marker of race, has become normalised in the political, social and economic rhetoric in a democracy. The study recognises the controversy and othering associated with the term ‘coloured’, but without delving into it, the label cannot be ruptured and disrupted.

To date, the dominant research on ‘coloured’ women in South Africa has not only relied on stereotypical depictions of sexualisation and slander but have served to entrench these women as displaced and valueless. As a result, very little is known about the resilience and contribution of ‘coloured’ women. In attempting to rebuild the existing research and knowledge on women classified as ‘coloured’ by the brutal system of apartheid, this study brings to the fore the lived experiences of seven women. The purpose of this study, therefore, is to reflexively explore the particular experiences and identities of ‘coloured’ women as professional educators in higher education, with special attention given to employment in roles centred around mathematics and mathematics education.

The racialised schooling experiences, tertiary education and winding career paths post-apartheid calls for a confrontation of race and race construction in South Africa. Critical Race Theory provided a relevant conceptual framework. Understanding how these seven women adopted the identity label of ‘coloured’, the extent to which it shaped them, and positioned or relegated them in South African society was not possible without consideration of identity and identity construction. In this regard, identity and identity construction concerning theories on (mis)recognition were studied. Using interpretivism and phenomenology as research paradigms, this study examined the lived experiences and identities of the seven women as they traversed through their schooling, and tertiary education, and as professional mathematics educators in various spaces of higher education.

The study showed that public spaces and separate schools were sites where racialised hierarchical othering and inequalities mirrored a demeaning picture of themselves, questioning their worth and diminishing their self-esteem. The way mathematics was taught, reflected similar kinds of divisions and differentiated treatment. Separate learning and teaching meant that higher grade learners received more attention and time, while standard grade learners were neglected under the guise that they were incapable of performing well at mathematics. As ‘coloured’ women, they had limited opportunities to, and funding for tertiary education – most of the participants opted for government-restricted teaching bursaries as a way into tertiary education. Following their tertiary education, there were no apparent pathways into professional mathematics education for ‘coloured’ women, and they sought alternative winding routes. While the women were determined and successful at

paving pathways into higher education, they continued to be at the mercy of higher education institutions who overlooked the challenges they overcame to participate in higher education, holding them to the same standards as those who had benefited from apartheid legislation. Consequently, their roles as professional mathematics educators transpired across a range of higher education spaces with no uniformity in their job titles and terms of employment.

Keywords: lived experiences, identity construction, 'coloured' women, mathematics education, higher education, (mis)recognition

OPSOMMING

‘Kleurling’, as ’n merker van ras, het in die loop van die die demokrasie genormaliseer met betrekking tot die politieke, sosiale en ekonomiese retoriek. Die studie erken die omstredenheid en vervreemding wat met die term ‘kleurling’ verband hou, maar sonder om te diep daarin te delf, kan die etiket nie verbreek en ontwrig word nie.

Tot op hede het die oorheersende navorsing oor ‘kleurling’-vroue in Suid-Afrika nie net op die stereotipiese uitbeeldings van seksualisering en laster staatgemaak nie, maar het gedien om hierdie vroue as ontheem en waardeloos uit te beeld. Die gevolg is dat baie min bekend is oor die innerlike krag en bydrae van ‘kleurling’ vroue. In ’n poging om die bestaande navorsing en kennis oor vroue wat as ‘kleurling’ deur die brutale apartheidsisteem geklassifiseer is, te herbou, plaas hierdie studie die kollig op die lewenservaringe van sewe vroue. Die doel van hierdie studie was dus om die spesifieke ervarings en identiteite van ‘kleurling’-vroue as professionele opvoeders in hoër onderwys te ondersoek. Spesiale aandag is gevestig op hul werksgeskiedenis in rolle in wiskunde en wiskunde-onderwys.

Die gerassifiseerde skoolervarings, tersiêre onderrig en kronkelende loopbane na apartheid het ’n konfrontasie van ras en raskonstruksie in Suid-Afrika ontlok terwyl Kritiese Rasseteorie’n relevante konseptuele raamwerk verskaf het. Om te verstaan hoe hierdie sewe vroue die identiteitsetiket van ‘kleurling’ aangeneem het, die mate waarin dit hulle gevorm het, en hoe dit hulle in die Suid-Afrikaanse samelewing geposisioneer of uitgesluit het, was nie moontlik sonder oorweging van identiteit en identiteitskonstruksie nie. In hierdie verband is identiteit en identiteitskonstruksie oor teorieë van miskenning bestudeer. Met behulp van interpretivisme en fenomenologie as navorsingsparadigmas, het hierdie studie die lewenservaringe en identiteite van die vroue ondersoek – eers gedurende hul skooldae, gevolg deur hul tyd op universiteit, en laastens as professionele wiskunde onderwysers in verskeie hoër onderwys kontekste.

Die studie het getoon dat openbare ruimtes en afsonderlike skole plekke was waar gerassifiseerde hiërargiese vervreemding en ongelykhede ’n vernederende prentjie van hulself weerspieël het, waar hul waarde bevraagteken is en hul selfbeeld afgebreek is. Die manier waarop Wiskunde aangebied is, het soortgelyke verdeling en gedifferensieerde behandeling weerspieël. Afsonderlike leer en onderrig het beteken dat hoërgraadleerders meer aandag en tyd ontvang het, terwyl standaardgraad-leerders afgeskeep is onder die voorwendsel dat hulle nie in staat was om goed te presteer nie. As ‘kleurling’-vroue het hulle beperkte geleenthede en befondsing vir tersiêre onderrig gehad – die meeste van die deelnemers het die regeringsbeperkende onderrigbeurse gekies as ’n manier om

tersiêre onderrig te ontvang. Na aanleiding van hul tersiêre onderrig was daar geen oënskynlike pad na professionele wiskunde-onderwys vir hierdie ‘kleurling’-vroue nie, en hulle het alternatiewe roetes gesoek. Terwyl die vroue vasbeslote en uiteindelik suksesvol was om hul pad in die hoër onderwys uit te kap, was hulle steeds uitgelewer aan die genade van hoëronderwysinstellings wat die uitdagings wat hulle moes trotseer om aan hoër onderwys deel te neem, miskyk, en wat hulle steeds aan dieselfde standaarde meet as diegene wat voordeel uit die apartheidsisteem getrek het. Gevolglik het hul rolle as professionele Wiskunde-opvoeders oor ’n verskeie hoër onderwysruimtes gestrek sonder eenvormigheid in hul werkstitels of diensvoorwaardes.

Sleutelwoorde: lewenservaringe, identiteitskonstruksie, ‘kleurling’-vroue, wiskunde-onderrig, hoër onderrig, miskenning

ACKNOWLEDGEMENTS

I would like to extend my sincerest gratitude to –

- the Universe, for guiding me towards this thesis at a time when I thought life was giving up on me, granting me the wisdom, patience and courage to do this study;
- my parents, sister, nephews, daughter and close friends, for their love, support, encouragement, for believing in me when I doubted my capabilities;
- my partner for knowing my study as well as I do, and his children;
- the remarkable women in this study, who shared their personal lives with me, without whose dedication and passion for mathematics would not have been possible; and as importantly,
- my supervisor, Prof Nuraan Davids for her support, encouragement, belief in my capabilities, guidance, patience and making this journey possible.

DEDICATION

I dedicate this thesis to my late mother, Shirley Kenny, my daughter Zahara Bella Davey, and the remarkable women in this study.

Thank you for your love, encouragement and support.

Anything is possible.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

AMESA	Association for Mathematics Education
BSc	Bachelor of Science
BA	Bachelor of Arts
BA (Hon)	Bachelor of Arts (Honours)
BEd	Bachelor of Education
BEd (Hon)	Bachelor of Education (Honours)
BC	black consciousness
CPUT	Cape Peninsula University of Technology
CAPS	Curriculum Assessment Policy Statements
DHET	Department of Higher Education and Training
FDE	Further Diploma in Education
HEI	Higher Education Institution
HDE	Higher Diploma in Education
ICME	International Congress on Mathematical Education
JC	Junior Certificate
LPTC	Lower Primary Teaching Certificate
MEd	Master of Education
MA	Master of Art
MSc	Master of Science
MALATI	Mathematics Teaching and Learning Initiative
NSC	National Senior Certificate
NGO	non-government organisation
PenTech	Peninsula Technikon
PMP	Primary Math Project
PGCE	Post-Graduate Certificate in Education
PGDip	Post-Graduate Diploma
PT	physical training
PE	physical education
REMESA	Realistic Mathematics Education in South Africa
SACHED	South Africa Committee for Higher Education
SC	Senior Certificate
STEM	Science, Technology, Engineering and Mathematics

SU	Stellenbosch University
TLSA	Teachers League of South Africa
UDF	United Democratic Front
UWC	University of the Western Cape
UCT	University of Cape Town
UNISA	University of South Africa

CHAPTER 1:
ORIENTATION AND BACKGROUND TO THE RESEARCH STUDY

1.1 INTRODUCTION

Research on the experiences of women in higher education abounds abroad (Bagilhole, 2013; Hoskins, 2010; Leathwood & Read, 2009; Mackinley, 2016), and to a lesser extent in South Africa (Shackleton, Riordan & Simonis, 2006), yet no study has looked at the particular experiences of 'coloured' women employed in higher education spaces in South Africa. Outside the borders of South Africa, Berry and Mizelle (2006), for example, share the personal accounts of women of colour in America employed in senior positions in the academy, who offer advice and support to less-experienced women of colour. Women of colour graduates in Science, Technology, Engineering and Mathematics (STEM) fields experienced de-legitimisation of their skills and expertise, feelings of not belonging, invisibility, and discrimination – sharing their stories created a new avenue to address their prejudicial experiences (Wilkins-Yel, Hyman & Zounlome, 2018).

Lived experiences of black women in higher education in South Africa are evident in the literature (Madileng, 2014; Msimanga, 2014; Ndlovu, 2014; Nkambule, 2014; Ramohai, 2014, 2019). Ramohai (2014: 2984), for instance, shares her professional experience as a black female academic entering a university as an unwelcoming, white male-dominated space with unsupportive promotion criteria to further her participation in higher education. The current literature of 'coloured' women either highlights the personal and social challenges by exposing their vulnerabilities in their communities (Herbst, 2006; Lesch, 2000; Moffett, 2006; Pitpitan, Kalichman, Eaton, Sikkema, Watt, Skinner & Pieterse, 2016; Sawyer-Kurian, Wechsberg & Luseno, 2009) or focuses on 'coloured' students' personal struggles about race and gender stereotyping in higher education spaces (Daniels & Damons, 2011; Snyder, 2014). There is a dearth in the literature regarding 'coloured' women as professional educators in South Africa, neglecting their contribution in the spaces of higher education.[1]

[1] Professional educators include education researchers, education specialists, lecturers, facilitator and teacher trainers.

1.2 CLARIFYING THE PARAMETERS OF THE STUDY

1.2.1 Women of colour and 'coloured' women

The phrase *woman of colour* is borrowed from America and is largely unused in South Africa. Instead, a racist and controversial phrase, *coloured woman,* is used unashamedly. In the South African context 'coloured' does not imply "black in dominant discourses, historically and contemporaneously" as is the case of women of colour in America (Erasmus, 2017: 21). Yet, their dissimilar linguistic origins and contexts have a particular commonality of otherness amongst women of colour, "incompetent, powerless, invisible, inferior, lazy, voiceless, sexually submissive, sexually brazen, irrelevant, welfare queens, [and] unfit mothers" (Wing, 2003: 1) – whether in America or South Africa. In all likelihood, it is the rendering of otherness – of not being white or black – that suspends these women (and men) in a displaced, nonetheless common space.

In South Africa, 'coloured' is a racial classification inherited from an apartheid regime that continues to be practised socially, economically and politically in a democracy. The use of the race categorisation of 'coloured' post-apartheid is uncomfortable – the categorisation holds painful and angered emotions for many who experienced apartheid. In all likelihood, 'coloured' women (and men) were caught in a prison of silence, expected to navigate themselves in a democracy while pretending that old ways of racialised divisions were no longer at play. A categorisation of 'coloured' holds baggage of othering and discrimination; but, by not delving into it, it cannot be disrupted, and "allows the category silently to live on" (Erasmus, 2012: 4). Without its inclusion in this study, the categorisation, and its meanings, could not challenge the existing literature.

I am aware of the criticism, contestation and controversy surrounding the term 'coloured'; however, I am also conscious of the slandered and disparaged representation of people viewed through a lens of 'coloured'. For example, an inaugural lecture by Jonathan Jansen on 16 September 2019 (Jansen, 2019), revealed five themes documented of 'coloured' people in research completed at Stellenbosch University during the last century. The themes illuminated that the predominant literature centred around 'intimate lives', 'decrepit lives', 'criminal lives', 'drinking habits' and 'pitiful lives' of 'coloured' people. Such is the sensitivity around matters of race and racialised science that the findings in Jansen's research culminated into several authors contributing to *Fault Lines, a primer on race, science and society* (Jansen & Walters, 2020). I viewed my research as an opportunity and a space to disrupt the oppressive perception of the nature of 'coloured' people, by giving a voice to 'coloured' women in particular, and a symbolic voice to all women who had suffered and continued to suffer oppression through predetermined scripts.

1.2.2 Globalisation of higher education and mathematics (STEM)

According to Nayyar (2007), higher education is an integral part of a national economy. As globalisation found its way across boundaries of the West, it had its own demands for scientific innovation, influencing what was to be taught, learnt and researched globally. In America, for example, STEM fields and careers took preference to meet the country's increasing economic challenges (English, 2016; Friedman, 2005; Marginson, Tyler, Freeman and Roberts, 2013). Investing in STEM for economic stability meant that corporate and government funding increased significantly for HEIs who prioritised STEM disciplines. While a focus on STEM has begun to decline in Europe, there has been a marked increase in interest in developing countries, like India and Malaysia (Kelley & Knowles, 2016).

A need for global STEM expertise has also put pressure on HEIs on the African continent via international government and corporate funding. The African Institute of Mathematical Sciences is an example of a pan-African higher education network funded by global corporates to build the pipeline of STEM in Africa. At a workshop held by the Academy of Science in South Africa, Adler (2017) observed that mathematics in mathematical sciences, earth sciences, biological sciences and economic sciences took preference to mathematics education. Adler's (2017) concern was that these preferences were in contrast to the local need for an understanding of the role of mathematics in mathematics education. She maintains, firstly, that there is a need for more mathematics teachers, given South Africa's history. Secondly, that preferences can give an impression that mathematics education has a lower status than, for example, mathematical sciences.

Le Roux (2016) makes an important point that the role of the curricula of mathematics has not specifically been part of transformation discussions in HEIs. Le Roux (2016:49) cautions that, if the curricula remains a muted topic at HEIs, mathematics may "(re)produce or transform existing inequities" in South Africa, These inequities have its roots in the importation of western philosophies of mathematics, deciding on the content of mathematics to be taught at HEIs and who teaches this content and not taking into account the social and situational contexts of a country (Ernest, 2009). The apartheid government latched onto the Balkanisation of mathematics (and other disciplinary fields such as physics, chemistry), labelling these subjects as pure sciences, and reserved mainly for white males. [2] Post-apartheid, the discourses of higher education and

[2] Balkanisation means to split into smaller parts that are interrelated to each other but are treated differently. While mathematics is one disciplinary field, it has since the 1980s been separated into different programmes at HEIs.

mathematics continued to intersect with the oppressive powers of race, class and gender. For example, in the democratic government's quest for equity and redress, preference has been given to black women (and men) in higher education, overlooking 'coloured' women (and men) who may also have experienced oppression during apartheid. While there remains an under-representation of black women (and) men in higher education in the democracy, the global economic and financially-driven STEM agenda places pressure on the government which, in turn, pressurises HEIs to build the STEM pipeline. The result is a Janus-faced dilemma: advocating white males privy to pursue STEM at HEIs during apartheid or promoting representation of black women (and men) in STEM at HEIs post-apartheid. Nonetheless, 'coloured' women continue to operate in the margins of (STEM) higher education.

1.2.3 Teacher education in South Africa

Apartheid legislation crystallised disparity in education in universities and colleges of education as inequality and discrimination were further embedded in rigid and racially segregated legislation. By mainly permitting participation of a white minority at universities, the government could assign specific discipline fields to maintain white economic power in South Africa – people of colour were required to apply for special permission to study at white universities. There were two choices of study at colleges – teaching or nursing. By the late 1980s, the Department of Coloured Affairs administered sixteen teacher training colleges, fourteen of which were located in the Cape (Council on Higher Education, 2010: 8). Since larger populations of 'coloureds' lived in the Western Cape, teacher education was the most likely option compared to nursing.

After 1994, most teacher training colleges were shut and college staff were integrated into universities or provincial education departments. At universities, restructuring teacher education meant rethinking the amalgamation of research-based teacher education and pedagogical teaching practice for pre-service teachers. At provincial education departments, partnering with higher education institutions (HEIs) for the professional learning of in-service teachers was vital for accredited qualifications. It meant that in-service teachers who had taken the brunt of an unequal apartheid education system had a first opportunity to further their education via tertiary qualifications. However, HEIs either felt unable to accommodate the professional learning of in-service teachers and sought partnerships with service providers such as non-government

---

Programmes such as mathematics for biology, mathematics for economics and mathematics for education were introduced at HEIs that tend to compete against each other despite being part of the same disciplinary field.

organisations (NGOs) or did not prioritise in-service teacher training at HEIs. Although the vast majority of initial teacher training is located within HEIs, in-service teacher training on the contrary is situated within a broader network of HEIs, provincial education departments and NGOs. Subsequently, those who are employed in the field of teacher education have a range of job titles. For this reason, I amalgamated and named education researchers, education specialists, lecturers, facilitators and teacher trainers as professional educators in higher education spaces. There is no singular avenue to becoming a professional educator in higher education, creating an undocumented career pathway that requires exploration.[3]

1.2.3 Mathematics education

Bernstein's (2000: 155-174) differentiation between vertical and horizontal discourses is useful to understand the positionality of mathematics as a specialist subject. To Bernstein (2000), a vertical discourse has a hierarchical structure, which is based on systematic sets of rules and procedures. Bernstein (2000: 160) identifies two forms of vertical structures: "a coherent, explicit and systematically principled structure", and a structure that "takes the form of a series of specialised languages with specialised modes of interrogation". Mathematics is a discipline of vertical structure – it has specific symbology to communicate with other parts of mathematics that comprises a range of overlapping concepts and conceptual development.

Bernstein (2000: 160-163) elaborates that while mathematics sits within a vertical discourse, mathematics is also located within the realm of horizontal discourse. He describes a horizontal discourse as a combination of lateral segments, each with their own influences and context. Stated differently, while there is a specialised cumulative symbolic language of mathematics, there is also specialised knowledge of mathematics for specialised fields. For example, there is a particular knowledge of mathematics required for specialisation in particular fields of study, such as engineering, statistics, cosmology, finance and so on – each requires specialised knowledge of mathematics in their careers.

---

[3] According to the National Development Plan of 2011 (National Planning Commission, 2011: 280), there are two professional pathways for teachers beyond deputy principal positions, namely, a managerial pathway - starting with principalship and progressing with management positions at district, provincial and national level or an academic pathway - starting as a head of a department followed by a curriculum advisory position at district, provincial and national levels.

It is common knowledge that there are differences in mathematics and mathematics education (Adler & Davis, 2006; Ball, Hill & Bass, 2005). Ernest (2009:71), for example, defines mathematics education as "both a set of practices, encompassing mathematics teaching, teacher education, curriculum development, research and research training, as well as a field of knowledge with its own terms, concepts, problems, theories, subspecialisms, papers, journals and books". While mathematics education expounds a horizontal discourse, Adler and Davis (2006: 293) have the view that the matter is far more complicated. Unlike engineering, statistics, cosmology and finance, as examples of mathematics in specialised fields that each lie within a vertical discourse, mathematics in the specialised field of education lies within a horizontal discourse. This means that as there is specialised knowledge of mathematics for engineering, there is specialised knowledge of mathematics in the field of education. To complicate matters further, education also lies within a horizontal discourse. According to Bernstein (2000: 163), within the horizontal discourses lie different 'grammars' because each segment in a horizontal discourse has its own language structure. A knowledge structure of mathematics in the horizontal discourse has a greater syntax in its symbology and specificity requirements to solve particular problems (which has a strong 'grammar') relative to education, which has a much broader language syntax in solving wider educational problems (and has a weak 'grammar'). Although education has a weaker 'grammar' compared to mathematics, Adler and Davis (2006: 293) posit that a particular knowledge for teaching mathematics might be in a particular *mathematics for teaching* (their emphasis) discourse as a solution to raising the 'grammar' of mathematics education. Research on knowledge for teaching mathematics in teacher education is complex and embryonic but on the rise (Adler, 2005; Adler, Davis, Kazima, Parker & Webb, 2005; Ball *et al.*, 2005; Ball, Thames & Phelps, 2008; Parker, Davis & Adler, 2005).

Mathematics education has been a recognised global institution evident in the formation of the International Commission on Mathematical Instruction (ICMI) in 1908, tasked to promote international cooperation in mathematics education. However, it took more than 100 years for the presidency of ICMI to be bestowed upon a South African woman for her global contribution towards mathematics education and, for the first black woman with a professorship in mathematics education to become a Vice-Chancellor of a South African university. These extraordinary achievements are both historical and rare but, for the majority of people of colour, mathematics and mathematics education in higher education were prohibited under white rule. This study is about 'coloured' women who are 'holders' of knowledge of mathematics and mathematics education, and voicing their journeys during apartheid and democracy. The focus is on their lived experiences and identities as they made their way through schooling as 'coloured' learners during apartheid, to

tertiary settings as ‘coloured’ students as the country transitioned from apartheid to democracy and then as teachers or lecturers in higher education environments – still as ‘coloured’ women, in a democracy.

The outcomes of the study provided insights into the presuppositions of identity construction of women of colour in higher education, prior to and during their careers, particularly in skill-shortage areas, like mathematics. Berry and Candis (2013: 46), for example, encourage placing the voices of women of colour at the centre of research to gain insight into the gap between “theoretical, conceptual, and practical disconnects and spaces”. Davids’ (2016: 6) thinking that “identity and reifications of identity are always in response to one’s social condition” was encouraging to voice lived experiences. Therefore, this study privileged the construction of narratives of ‘coloured’ women and the personal stories they chose to disclose in becoming professional mathematics educators – an opportunity to change the discourse of stereotypical views of ‘coloured’ women.

1.3 POSITIONALITY

Failing to immerse myself in this study would be a missed opportunity for the reflexive complexity of identity construction in the sphere of mathematics education. In this regard, what follows is an account of my lived experiences in forming a career in mathematics education:

As a woman of colour, classified as ‘coloured’ during apartheid in South Africa, I encountered similar women in my role as a professional mathematics educator who expressed and shared complexities experienced in developing their careers in higher education. These women, like me, were raised and educated during apartheid and are qualified, and capacitated to fulfil the roles and responsibilities of professional educators in higher education. As a professional mathematics educator navigating my career from apartheid to a democratic South Africa, I encountered personal feelings of professional inadequacy when I observed professional opportunities being made available to white and black women in South Africa. When I shared my observations with other ‘coloured’ women with similar careers in mathematics education, they shared a range of emotions and responses that centred around their sense of professional value (or lack of it), both during apartheid and in a democracy. None, like me, could articulate the motivation for their emotions. Since taking a break from my role as a professional mathematics educator and my growing interest in what appears to be very particular experiences of female ‘coloured’ mathematics professional educators, I am interested in heightening my awareness of the lived experiences of ‘coloured’ women in higher education, how these experiences defined their identities as ‘coloured’ women, and how these experiences and identities limited and influenced their potentialities.

In 1997 the government introduced the retrenchment of teachers. I felt vulnerable as the last teacher to be employed in a permanent position at the school, so when the opportunity came to teach abroad, I grabbed it. I was surprised that the principal of the school abroad put in the extra effort to apply for a work permit on my behalf, despite the challenge of having to prove that she was unable to find a local citizen to fill the role in the United Kingdom. Within a space of three years, I was promoted to middle leadership and was earmarked for an assistant principal position. I opted for a promotion as a mathematics teaching and learning consultant in a high performing district, and under my leadership, worked with a team who raised the mathematics results of the district to one of the highest in the country. In sum, my personal background was unknown, and my potential to excel was coming to fruition in a country where people did not judge me based on my race; any racial bias was unfelt.

After fourteen years, I returned to South Africa as a junior lecturer of mathematics education at a non-government teacher training institution affiliated to a university. My experience abroad led me to believe that my role could become more senior. After much negotiation, I was offered the position of Senior Programme Coordinator. My 14-year absence from South Africa had a significant drawback: I had no professional educational connections with universities, education departments or non-government institutions. The responsibilities in my new position were largely administrative, and my lecturing was limited to two short courses per year. I wanted to expand my responsibilities with a greater cognitive challenge with the view of expanding the teacher training programme, and I discussed this with the leadership of the non-government institution. In the eyes of the leadership, I was a junior lecturer (a senior lecturer required a PhD), I was a programme coordinator and not a programme manager (they already had an academic manager), I was already a senior staff member (acknowledged in my title), and I could not be a director (the institutional structure did not allow it). Put differently, it felt like my professional ability was dismissed, and my source of value removed, while amongst the recipients of my expertise, my ability to understand and educate teachers was outstanding.

Meanwhile, in my role outside of South Africa, I trained national inspectors, helped to design educational programmes and advised on the implementation of national teacher training programmes. However, after several talks and propositions of alternative roles I could have in South Africa, a consensus for more responsibility with a greater cognitive challenge could not be reached, and I resigned. In South Africa, a ‘coloured’ identity imposed a sense of inferiority on me while when abroad, I felt a sense of pride as a woman of colour. Painfully I realised that having been raised and schooled during apartheid, had its own silencing effect on my family and me, and the complexity of navigating a new democracy brought about its own silencing effect. It is in this light

that this study foregrounded an opportunity to explore the *unexplored* lived experiences of women who, like me, were classified as 'coloured' and had to find alternate ways to navigate their careers into professional mathematics education in a democratic South Africa.

1.4 RESEARCH QUESTION AND SUB-QUESTIONS

Following the above discussion, this study was guided by the following primary research question:

> How have the lived experiences and identities of 'coloured' women in South Africa determined and influenced their roles as professional mathematics educators in higher education?

In support of the main research question, the sub-questions were:

- What were the schooling experiences of women who were classified as 'coloured' during apartheid?
- What were the tertiary education experiences of the women classified as 'coloured'?
- What were the experiences (highlights and challenges) of pursuing a career in mathematics education during post-apartheid South Africa?

The study is deliberately open-ended because of the complexity and multi-layeredness of the problem, and to offer critical engagement and renewed insights. While unintentional, I acknowledge that there is a causal element in the use of 'determined' and 'influenced' in the main research question.

1.5 CRITICAL RACE THEORY

This study was informed by Critical Race Theory (CRT) as its conceptual framework. I was drawn to Solorzano's (1997: 6) definition of CRT described as follows:

> *A framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyse, and transform those structural and cultural aspects of society that maintain the subordination and marginalization of* [*p*]*eople of* [*c*]*olor.*

Ladson-Billings (1998: 9) provided a purpose of CRT as:

> *an important intellectual and social tool for deconstruction, reconstruction, and construction: deconstruction of oppressive structures and discourses, reconstruction of human agency, and construction of equitable and socially just relations of power.*

However, it was Bernal and Villalpando (2002) who provided a handle on race using CRT for this study. The authors articulated that despite the faculty's efforts and belief that women of colour were

qualified and capable of fulfilling roles in HEIs in their study, they were not necessarily valued because their lived experiences were not taken into account. Criteria for employment and promotion at HEIs were based on meritocracy – a Eurocentric epistemology which tended to ignore, misread or discredit epistemologies of women (and men) of colour and "based solely on their individual efforts" (Bernal & Villalpando, 2002: 171).

This study's point of departure is race and race construction. To begin with, scientists had a two-pronged view of race as biology. On the one hand, some geneticists looked for commonality in the genes of humans so they could assign genes to a particular race and, on the other hand, others attempted to group human traits (like phenotypes) according to race (Brown & Armelagos, 2001). However, in 1972 Richard Lewontin changed the discourse of race, proving that the genetic differences were largest within a particularised race compared to genetic variations between races (Brown & Armelagos, 2001: 35) and, subsequently, sufficient proof demonstrated that there was no correlation between race, human traits and cultures. Craig Venter, chief scientist of the Human Genome Project (1990-2003) later refuted and scientifically 'disproved' the existence of race (McCann-Mortimer, Martha & LeCouteur, 2004).

Once race as a scientifically viable concept was disregarded, I turned my attention to race as a social construct. Sociologists, Omi and Winant (1994: 56), for example, were of the view that the objectification of human bodies, such as the categorisation of people using phenotypes, was developed by sociohistorical processes which brought meaning to race. Those in power decided on the relevance of the content of racial meanings and made decisions on whom to exclude. Erasmus (2017: 52), an anthropologist, viewed the Enlightenment period as a time when European societies compared differences in people relative to a 'perfect human', rather than by race. Erasmus (2017: 52) foregrounded 'the look' of a European as a presupposition to the social, economic and political powers that gave meaning to race. In other words, the more a person 'looked' European, the closer a person could be to a perfect human (Erasmus, 2017: 58). Leonardo Da Vinci's *Vitruvian Man* (1487-1490) and the *Mona Lisa* (1503-1507) are examples of embellishment of the perfect man and woman from which to compare other humans.

Next, it was important to consider race construction which led to apartheid. Here, I drew on the writings of Magubane (1979), who provided insight into the origins of racial oppression and class exploitation in South Africa and how these forms of subordination were used as powerful weapons for capitalist benefits by dominant political and economic forces. Magubane's insight foregrounded an understanding of Wolpe's (1988: 24) conceptualisation of "colonialism of a certain type" in South Africa. He brought two class structures to the attention – a well-developed capitalist system

for whites and an underdeveloped system of exploitation and subordination for the colonised masses. However, 'colonialism of a certain type' required justification. European eugenicists tapped into the sexualised and racist minds, planting ideas that interracial relations were a particular scientific problem – miscegenation of white and non-white races could lead to "mentally, physically and morally inferior" hybrids of humans (Dubow, 2013: 227). Intellectual collaborators who were theorising apartheid, listened to these ideas of miscegenation to justify the purity of an Afrikaner race and used their powers within the church and their perceptive understanding of Afrikaner nationalism to actualise apartheid (Dubow, 2013). According to Dubow (2013: 221-222), in the end, it was the conceptualisation of human difference and Afrikaner solidarity that naturalised and sealed apartheid ideology, justified by historical heroism, tradition and the experience of a unified Afrikaner *volk*.

Race and race construction continued into democracy, under the auspices of a non-racial constitution. According to Ansell (2006), the idea of non-racialism served well during South Africa's transition period from 1990 to1994. To Ansell (2006: 340), a significant dilemma for the democratic government was the removal of juridical racial barriers for moral citizenship while, at the same time, legislating racial grouping of white, black, 'coloured' and Indian for strategic redress and equity. For example, Mangcu (2015), supported Luthuli's 'multi-racial society in a non-racial democracy' to read as a 'multi-racial society in an anti-racist democracy'. Mangcu (2015: 10) supported the recognition of people's racial experiences and their "contestation and reformulation of imposed racial essences to create new identities", thereby supporting the reinvention of a new multi-racial society. Soudien (2016: 145) clarified that Mangcu's proposition of anti-racism assumed the existence of race, the same term that, Soudien affirmed, propagated "bodies [as] … containers of values, meanings, capacities and potential". Soudien (2013: 27) was adament that any positivist stance on race created an illusion of objectivity and neutrality of race that filled an empty concept – race – with positive content to fight racism; therefore, empowering race. Contrarily, he promulgated a consciousness that functions apart from the illusion of race and focuses on one's potentiality (Soudien, 2016: 148).

1.6 BEGINNINGS OF 'COLOURED' TO STEREOTYPES OF 'COLOURED' WOMEN

The use of the label of 'coloured' is common practice in South Africa. Yet, the literature of its roots is slim. My journey of discovering the roots of 'coloured' began with the terminology of *people of colour*. According to Sumpter (2008: 19), the phrase, *people of colour* was coined during the slave trade, particularly in New Orleans in Southern Louisiana, during the colonial periods of the French (1682–1763) and the Spanish (1763–1800). A blend of traditions and customs between the French, the Spanish and the Africans created a racial fluidity that was not practised as openly compared to

the rest of Louisiana and the United States. Those who were conceived from both European and African ancestry became known as *gens de couleur libres*, which translated into *free people of colour* (Sumpter, 2008: 19). A tripartite fluid racial structure came into being by the creation of a middle-tiered *free people of colour*. As social practices of colonial traditions were replaced by Anglo-American practices, legislation began to lean towards binary categorisations of black and white. Under Spanish and British rule, there were complex rankings of *free people of colour* off the shores of Louisiana on the Caribbean islands. Some had privileges and others did not – each privilege dependent on relations with white counterparts (Sio, 1976: 8-9), creating fragmentation of the term *coloured* in different parts of the Caribbean.

The 20th century saw an influx of colonised people to the motherland of their colonisers. Britain, for example, saw an influx of colonised people from the Caribbean, particularly after the Second World War (1939–1945). Returning to the metropole was unwelcoming and brought with it a plethora of protests against *coloured* immigrants. In the 21st century, the derogatory slur of *coloured* is scarcely used in Britain. *People of colour* appeared to be a more acceptable term for "[w]hite ethnic grouping … [and]… immigrants from Latin America, Asia, India and Pakistan in addition to people who can claim African ancestry" (Christian, 2005: 327).

The term *coloured* in Southern Africa has a range of meanings. One of the meanings related to the original inhabitants of the land. While other tribes were living in Southern Africa, the largest of the tribes and the original inhabitants of Southern Africa, were the Khoi herders and San hunter-gatherers (Besten, 2009; Richards, 2017; Van Wyk, 2016). Khoisan unions with Europeans and slaves, and the assimilation of European and slave languages, led to an alteration of Khoisan lifestyles. According to Richards (2017: 219), instead of embracing the Khoisan-Euro-slave heterogeneous persons, the colonialists preferred to "marginalise, reject and bastardise" them, and they were labelled as *coloured* in South Africa and Namibia.

Muzondidya (2009: 158) adds that churches and missionaries in Zimbabwe had a role to play in the creation of a *coloured* category in Southern Africa. They believed that *coloured* children were offspring of European lineage and, subsequently, the colonial government was responsible for the well-being and protection of their offspring. Children of these unions were referred to as *mixed-race* or bastard children. The absence of European fathers meant that the children were marginalised as illegitimate with detrimental effects to their rights of inheritance in their father's home country. The mothers and children were left with challenges of biological inheritance and stereotypes of racial impurity (Milner-Thornton, 2009: 186).

In South Africa, however, 'coloured' was a racial classification during apartheid and continued post-apartheid with meanings that superseded the 'mixing' of races, with detrimental consequences of socioeconomic deprivation and political struggle, spawn from predetermined scripts of overt sexualisation, substance abuse and violence. Particularly, women were portrayed as sex objects, promiscuous and vulgar during colonisation and apartheid – the disrespectful and toxic assumptions continue today, denying individuality and potentiality of 'coloured' women.

1.7 IDENTITY CONSTRUCTION AND (MIS)RECOGNITION

Once I had clarity on race and race construction, an in-depth understanding of the origins of the term *coloured,* its meaning as an identity in the South African context, I searched for a theoretical framework that clarified identity construction from different theoretical perspectives. While identity construction brought with it a myriad of external contexts and processes – often beyond the control of individuals – the primary interest was how the women adopted the identity label of 'coloured', the extent to which it shaped them, and positioned or relegated them in South African society. In this regard, I drew on three key theorists, namely Charles Taylor, Axel Honneth and Nancy Fraser, to put forward a clarification of identity construction concerning (mis)recognition.

Firstly, Taylor (1998: 26) introduced a politics of identity. He proposed an interdependency between identity and recognition with a presupposition of dialogicality, averring that recognition is not a mere consideration for some and not others. Conversely, "[i]t is a vital human need". Secondly, Honneth (1995, 2007) forwarded that identity construction was an intersubjective process between two persons that depends on both persons recognising each other as eligible contributors to a shared value during an encounter. Once both persons recognise the value that each brings to the encounter, then the encounter triggers a relation-to-self. The significance of the intersubjective process was that it either hindered or fostered three forms of self-relating: self-confidence, self-respect and self-esteem.

Thirdly, Fraser opposed the views of Taylor and Honneth of the interdependency of identity and recognition. She posited a status model of (mis)recognition that suggested that a theory of recognition via identity construction reified subordination of identity groups. Instead, Fraser believed that the institutional norms and practices, which served as gatekeepers to the 'haves and have-nots', perpetuated subordination. Furthermore, Fraser (2000) felt that while Taylor and Honneth's theories were useful, their theories did little to offer alternatives to victims of subordination – it was not up to victims to sort out subordination but the perpetrators themselves. Therefore, Fraser (2000) promulgated that individuals be recognised for the contribution that they can make on par with all individuals, which she conceptualised as *parity-participation*. Using

Taylor (1989, 1998), Honneth (1995, 2004, 2007) and Fraser's (2000, 2008a, 2008b) theories, I compared and contrasted the lived experiences of 'coloured' women who pursued professional mathematics education in higher education.

1.8 RESEARCH DESIGN AND METHODS

The research paradigms for this study are interpretivism and phenomenology.

Cohen, Manion and Morrison's (2011: 17) view of an interpretive research paradigm, as "characterized by a concern of the individual", to understand the "subjective world of human experience" sat well with my beliefs that the lives of these women mattered, and required voicing. The authors' views were as follows:

- events and individuals are unique and mostly non-generalisable;
- there are multiple interpretations of, and perspectives on, single events and situations;
- reality is multi-layered and complex; and
- we need to examine situations through the eyes of participants.

According to Cresswell (2014: 13), phenomenological research includes an in-depth engagement with a small number of participants in order "to develop patterns and relationships of meaning". I drew on the work of Edmund Husserl (1859-1938) who, according to Eberle (2014: 186), referred to phenomenology as "back to the things themselves", made possible by personal consciousness, allowing the essence of the phenomenon to emerge. My study elucidates a consciousness of seven women classified as 'coloured' in relation to CRT, (mis)recognition and identity construction. A phenomenological paradigm added value to understand the kernel of the study – the lived experiences and identities of 'coloured' women as professional mathematics educators in higher education.

For this study to be possible, three research methods were implemented. Firstly, I drew on the teachings of Yin (1994, 2009, 2014) to promulgate a single-case study of 'coloured' women as professional mathematics educators with embedded units. The embedded units consisted of seven participating 'coloured' women whose identity constructions were influenced by seven different lived experiences revealed by seven untold 'stories'. I identified the central focus of the case study as lived experiences and identities of 'coloured' women, defining 'lived experiences' as experiences during childhood and adulthood of education while attending educational settings such as primary and secondary schools and tertiary institutions. I selected the units of analyses as 'coloured' women who are professional mathematics educators. The boundaries of the study were defined as women classified as 'coloured' during apartheid in South Africa and who pursued (or had pursued) roles as

professional mathematics educators during post-apartheid South Africa. To avoid a pitfall in the embedded design, I continually returned to the central focus of the research.

Secondly, I realised that the term 'coloured' was deeply discriminating to me and, therefore, an ethnography became an imperative research method for this study. As I began the process of planning one-on-one interviews as a third research method, I drew on the advice of Babbie and Mouton (2001: 289) that "a qualitative interview is essentially a conversation in which the interviewer establishes a particular direction for the conversation and pursues specific topics raised by the respondent". The construction of the qualitative interview questions was based on the sub-research questions and allowed for a rich, detailed narrative for thematic analysis.

The sampling strategy for this study was purposive sampling. Cohen *et al.* (2011: 156-157) described purposive sampling as a feature of qualitative research that selected a sample for specific cases. The purposive sample in this study was a particular case of 'coloured' women who had "in-depth knowledge of particular issues" as professional mathematics educators in higher education. I was guided by three of Cohen *et al.*'s (2011: 157) motivations for purposive sampling, namely, to:

- achieve representativeness;
- enable comparisons to be made; and
- focus on specific unique cases.

The participants consisted of a small-scale non-probability sample of seven women, racially classified as 'coloured' during apartheid.

1.9 ETHICAL CONSIDERATIONS

In November 2018, I applied for ethical clearance of my study to the Stellenbosch University Research Ethics Committee. The ethics committee approved the following documents in March 2019:

- my research proposal;
- list of semi-structured interview questions; and
- a participant consent form, which I would be inviting participants and requesting the participants to read, complete and sign before being interviewed.

After ethical approval, I proceeded to constitute my research sample. After the research participants agreed to participate in the study, each participant completed a consent form, which they read, completed and signed before their individual interviews. After answering further questions, each agreed and signed consent forms, emphasising their anonymity and confidentiality, and their right to withdraw at any point of the study.

1.10 CONSIDERATION FOR VALIDITY AND CONFIDENTIALITY

Each of the participating women was interviewed separately. Following semi-structured interviews, I transcribed and forwarded the respective transcript to each participant tasked with checking accuracy and correctness. The interviewees made changes, as necessary. A reflection period of up to one month allowed the participants to ponder whether their transcript misrepresented their thoughts in any way (Johnson, 1997). Excluding myself, four out of six interviewees made changes to their transcripts, which helped to provide greater accuracy to their thoughts, feelings and experiences. Johnson (1997:285) refers to 'getting into the minds of participants' as interpretive validity. The remaining two interviewees made no changes and were satisfied with their transcripts. In no way were the participants discriminated based on their lived experiences, identity, cultural background, religion, qualifications, gender, mother tongue or any background outlined in the ethical research guidelines of Stellenbosch University.

Pseudonyms were used throughout the study for anonymity and confidentiality. A voice recorder captured the interviews, which were then transcribed electronically by the principal researcher. Names and data were kept separately and in a secure environment.

1.11 LIMITATIONS OF THE STUDY

There were four broad limitations to this study. The first important consideration for the study was the extent to which the women revealed their private lives. Some chose to be part of the study, while others chose to defer because of the sensitivity and personal nature of the study. The second limitation was that the primary data was constructed from a small-scale sample of seven 'coloured' women. There were a small number of participants because of the low numbers of the particularised women in roles of professional mathematics educators in higher education. The third limitation was the use of the term 'coloured', as a particular classification during apartheid comes with its own critique. However, I could not deny that the women, like me, existed – their stories needed to be told.

1.12 CHAPTER OUTLINE

There are eight chapters in this thesis.

- Chapter 1 outlined the thesis, beginning at my positionality, the background and motivation for the study, which led to the main and sub-research questions. The conceptual and theoretical frameworks were summarised and for the reader to have an overview of the term, and later, classification of 'coloured'. Aspects of the research methodology, ethical considerations, validity and confidentiality, and limitations to the study were also provided.

- Chapter 2 explains the conceptual framework and takes the reader on a historical journey of race and race construction.
- Chapter 3 provides a literature review of 'coloured' women with special attention given to the labelling of *coloured* in the Antilles followed by its use in Southern Africa and particular classification in South Africa.
- Chapter 4 elaborates on the theoretical framework, drawing on the work of key theorists of identity construction and (mis)recognition.
- Chapter 5 clarifies the research methodology, referring to the research paradigms, the research methods and the research context. The sampling process, issues of validity and confidentiality and ethics are considered.
- The findings are presented in Chapter 6 as themes.
- Chapter 7 is the core of the study as it provides the analysis of the findings in relation to the sub-research questions.
- Chapter 8 articulates my conclusions where the main findings are drawn together from the results of the previous chapters. The significance and value of the study are shared with future recommendations for further study.

1.13 CHAPTER SUMMARY

This study stemmed from two concerns that guided my research questions. The first was the consequence of my lived experiences as a 'coloured' woman navigating my career as a professional mathematics educator in higher education spaces, unable to find explanations for my feelings of misrecognition. The second was the dearth of literature of not only the voices of 'coloured' women but also an absence in the literature of those who are or had been professional mathematics educators in higher education. My focus was on exploring the lived experiences and identities of women classified as 'coloured' during apartheid who had been or were, professional mathematics educators in a democratic South Africa.

This chapter outlined the parameters of the study and my positionality through which I formulated my main and sub-research questions. I sketched an overview of the conceptual and theoretical frameworks. A brief outline of my research designs and methods, ethical considerations, validity and confidentiality, limitations of the study and chapter outline were also provided.

The next chapter will expand on the conceptual framework and will take the reader on a journey of the perspectives of other researchers over time regarding race and race construction.

CHAPTER 2:
RACE AND RACE CONSTRUCTION

2.1 INTRODUCTION

The primary research interest of this study was to explore how the particular lived experiences of women, classified as 'coloured' during apartheid, who may not necessarily have self-identified or currently self-identify with the racial designation, have influenced their professional lives as mathematics educators in higher education[4]. As an introductory thought, I am drawn to the words of David Goldberg (2009a) in his writing about racial knowledge. He states that racial knowledge "consists of *ex hypothesi;* it is in a sense and paradoxically the assumption and paradigmatic establishment of difference" (Goldberg, 2009a: 226). My interpretation of his words is that whoever is the author of the proposed hypothesis of human difference is, somewhat, removing the self-construction of knowledge of the other by assuming that the author knows what is best for the other. By generalising knowledge of the other(s), the other(s) are denied the opportunity to voice who they are and what they stand for and subsequently, become silenced subjects (*ibid.*). My study allows seven 'coloured' women to self-represent their lived experiences and, for this reason, the study is interested in race.

This chapter's point of departure is race and race construction. Firstly, I will relay the construction of race by Europeans during their colonial conquests by considering race as biology, race as sociohistorical processes, and race as a particularised 'look' relative to European perceptions of being fully human. I will then, specifically, focus on race and race construction leading to apartheid and during post-apartheid South Africa. This will be followed by why this study is best shaped and informed by Critical Race Theory (CRT) as its conceptual framework.

2.2 RACE AND RACE CONSTRUCTION

2.2.1 Race as a biology

According to Appiah (2015: 3), the normative view of race leading to the 19th century was that of essentialism – that is, "the idea that human groups have core properties in common that explains not just their shared superficial appearances but also the deep tendencies of their moral and cultural

[4] Racial population groups used during apartheid and post-apartheid South Africa are in inverted commas.

lives". Race was a way to describe inherited morals and tendencies about the history and culture of different people. Western othering, Western European imperialism and post-Enlightenment provided an opportunity to 'prove' that differences amongst humans were 'real', using science as a vehicle for its 'proof'. Appiah (2015: 4) affirms that scientific study in the 19th century was new in that a search for biological commonality within particular races of people included the additional factor of race having political implications, that is, a human desire to belong to a race as a nation.

There were two ways in which scientists attempted to 'prove' race. Firstly, using biology to look for the commonality in the genes of humans and, secondly, grouping human traits according to race. It could be argued that Robert Chambers (1844) and Herbet Spencer (1852) foregrounded a biology of race (Rogers, 1972). According to Rogers (1972: 268), it was Darwin's study in 1859 that caught the eye of "those who were looking for scientific support for opinions already held". Charles Darwin (1809–1882), a Western European natural scientist, who tested and statistically analysed the distribution of traits of organisms in support of his study, *On the origin of species by means of natural selection* (1859). Having started his experimentation using humans as organisms, Darwin seeded an avenue of thought for human scientific difference. While Darwin may not have initiated evolutionary biology in his work, Appiah (2015: 3) believes that Darwin led the foundation for propagating a scientific taxonomy of humans, both racially and culturally. Leading from Darwin's use of statistical analysis and testing methodologies, Hernstein and Murray, authors of *The bell curve: Intelligence and class structure* (1994), tested variation in intelligence across population groups, correlating race, social success and intelligence, creating scientific racism.

In contrast, a ground-breaking study in 1972 by Richard Lewontin, an evolutionary biologist (cited by Brown and Armelagos (2001: 35)), compared the genetic variation between races, populations within races, and amongst individuals within populations of particular races; which changed the discourse of the concept of race as biologically bound. The findings of Lewontin's study concluded that genetic differences between races were 6.3%, between populations within races were found to be 8.3%, and amongst individuals within populations, found to be 85.4%. The results highlight that genetic differences were largest between individuals within populations of a particular race compared to genetic variation between races. The interpretation of the results was contrary to the common belief that human traits differed largely between races. Jorde and Wooding (2004) concur that genetic variation within a single race was greater than the variation across racial groups, and while genetics could assist with anthropological insights, cultural differences could not be confirmed genetically. Results by Hunley, Cabana and Long (2016: 567) agreed to a "substantial heterogeneity in the amount of variation harbored by human populations, […] even amongst the least diverse population". The results show that independent of genetic variation among populations

of a particular race, genetic variation within a population is not homogeneous. Furthermore, Craig Venter, chief scientist of the Human Genome Project (1990-2003), announced that race is not a scientifically viable construct (McCann-Mortimer *et al.*, 2004).

Following a different view – that of human traits binding race – Brown and Armelagos (2001: 34) suggested that attempts to correlate race and human traits (such as phenotypes) were based on the assumption that the boundaries between races were dependent on a particularity of traits (and cultures). The authors believed that a further assumption was that racial classification (and cultural signifiers) had a presupposed taxonomy. Brown and Armelagos (2001: 35) forewarned that, as the number of traits was increased, racial classification was challenged; firstly, an agreement had to be reached regarding the grouping and ranking of traits and secondly, traits (and cultural signifiers) required allocation to specific population groups; both of which were presupposed and would invariably influence the outcomes of studies. The concept of a race as natural and fixed, and different from one race to another race, is therefore flawed as genetically-bound and phenotypically-bound phenomena.

2.2.2 Race as a sociohistorical process

Machery and Faucher (2007: 1209), amongst many others, believed that the social sciences accept that race, in terms of scientific binding, does not apply to humans. Instead, race is a social construct that functions within social environments and that considers the diversity of human beings. How race is socially constructed differs from one theorist to the next and has similarities and differences from one country to the next. Omi and Winant (1994), both sociologists, are examples of theorists who propose the inclusivity of culture in their theory of racial formation.

In the opinion of Omi and Winant (1994: 56), the social construct of race, for example, in America, portrays itself as a "decentred" concept with complex social meaning that is under perpetual transformation and struggle. Omi and Winant (1994: 56) posit that the concept of race "signifies and symbolizes sociopolitical conflicts and interests in reference to different types of human bodies". Their view is that the objectification of human bodies, such as the categorisation of people using similar perceived phenotypes, is deliberated by social and historical processes that bring meaning to race. The sociohistorical processes include political structures that support hierarchical inequalities and exclusion to pursue dominant political interests, which also decides on the content and relevance of racial meanings.

Omi and Winant (1994: 56) theorise racial formation which they define as "the sociohistorical process by which racial categories are created, inhabited, transformed and destroyed". From the perspective of racial formation, the authors view the construction of race as social structures linked

to cultural representation. Better understood, social structures take into account historical racial subordination while cultural representation considers the "origins, patterning and transformation" of differences in races which Omi and Winant think are essential.

The significance of a racial formation process is that the representation of race, in the view of Omi and Winant, is never created as a new idea. Instead, the meaning of race is dependent on previous sociohistorical contexts that change as consequences of political contestation. Their view draws my attention to the changing classification of a race in America, articulated by Appiah (2009: 669), as "following the badge of color" when he brings to my attention the tracking of labels from "African" to "Negro" to "colored race" to "black" to "Afro-American" to African-American" of an individual; each label is an effect of a sociohistorical context. It is, therefore, reasonable for Omi and Winant (2004) to reject the objectification of race. Continuing this chain of thought, objectifying race does not take into account the relational character of race, it does not consider the historical authenticity and the social understanding of race, and it does not take into account the way individuals (and collectives) have to "manage incoherent and conflictual racial meanings and identities" in their everyday lives.

2.2.3 Race as a comparison to 'the look'

From an anthropological perspective, Erasmus (2017: 52) postulated that the differentiation of people during colonisation was determined relative to a 'perfect human', which started during the Enlightenment, rather than by race itself. Erasmus (2017: 52) foregrounds 'the look' of a European as a presupposition to the social, economic and political powers that gave meaning to race. The more a person 'looked' European, the closer a person could be to a perfect human (Erasmus, 2017: 58). One example, Leonardo Da Vinci's *Vitruvian Man* (1487-1490), became an embellishment of a perfect measurable man which, to some extent, laid a premise for European whiteness as a signifier of 'the look'. Erasmus (2017: 58) believes, the construction of white, as a representation of the 'perfect human', came into being, marking the human body, and comparing it to a preconceived notion of the 'perfect human'.

Erasmus (2017: 57) notes that race was constructed during four processes: "hierarchical differentiation of the human by European colonists and scientists; hierarchical differentiation between the human and the non-human by the same colonists and scientists, in the interests of imperialism; a biological or scientised conception of race developed by European Enlightenment scientists; and colonial conceptions of culture as a bounded dimension of the human". Erasmus' idea of the construction of race differentiation draws my attention to the words of Derrida (1981)

whose critique of Western philosophy highlights a normative hierarchical approach towards an 'other':

> *Western thought [...] has always been structured in terms of dichotomies or polarities: good vs. evil, being vs. nothingness, presence vs. absence, truth vs. error, identity vs. difference, mind vs. matter, man vs. woman, soul vs. body, life vs. death, nature vs. culture, speech vs. writing. These polar opposites do not, however, stand as independent and equal entities. The second term in each pair is considered the negative, corrupt, undesirable version of the first, a fall away from it. Hence, absence is the lack of presence, evil is the fall from good, error is a distortion of truth, etc. In other words, the two terms are not simply opposed in their meanings, but are arranged in a hierarchical order which gives the first term' priority', in both the temporal and the qualitative sense of the word.*

The consequence of the construction of race, foregrounded by the four processes highlighted above by Erasmus, is that human bodies are ordered in a particularised hierarchy of othering as "fully human, not quite human yet and not human" (Erasmus, 2017: 53). For example, in Fanon's (2009: 326-335) essay, *The fact of blackness*, Fanon boldly articulates the lived experiences of black people in the Antilles. Colonial racism assumed that colonised black people were subordinate socially, economically and politically relative to their colonisers, and based on their race. Fanon (2009) takes us on a journey of his negative experiences of being objectified and feared by his white onlookers during his visit to France. He internalises the objectification to the extent that he begins to think of himself in the third person as if his true self no longer has value to himself. His negative experiences probe the questioning of his identity and his worth, which brings him to the conclusion that being black means, firstly, that black is subservient to white and secondly, that black is always in relation to being white. His predetermined and misconstrued identity in France is, in a sense, a dehumanised reconstructed black self, created by his white counterparts. Fanon's account of being black concurs with Erasmus' view that phenotypes, as a measure of the 'perfect human' and an indicator of subordination in both the colonised and coloniser's lands, mattered during colonisation. It mattered because, in the minds of white colonisers, they were superior to blacks (the other).

Erasmus (2017: xxiv) explains race as a type of "double politics" – that is, race as a construction while, simultaneously, race as 'real'. By 'real' she means race as a sense-making tool of our world, not in the essentialist sense of the binding of race. The question that follows is: How do we know what race looks like? Erasmus (2017: 50) posits 'the look' is the directive for knowing race, influenced by racial naming and racial marking that are dependent on sociohistorical and political contexts. Erasmus (2017: 50) draws on Kalpana Seshadri-Crooks' proposition of 'the look': while racial naming and racial marking change and are dependent on sociohistorical and political

contexts, 'the look' remains constant as a technology that identifies and differentiates race. The point is that independent of the marker (black, white, foreigner, immigrant, etc.) and the meaning the marker brings with it, 'the look' remains stable.

According to Seshadri-Crooks' (2000) Lacanian analysis of race, 'the look' is stable and, therefore, race differentiation continues as it reveals itself as visibility rather than in meaning. Subsequently, the body is marked before sociohistorical and political contexts, rather than as consequences thereof. As Erasmus (2017: 52) skilfully put, 'the look' "depends on a presupposed racialised mind's eye" by marking the body beforehand, and reifies race. From her perspective, the idea of race is not fixed or biologically natural, but naturalised and reified by the interactions and relations between people categorised as different races by those who hold power to do so.

2.3 RACE CONSTRUCTION LEADING TO APARTHEID IN SOUTH AFRICA

2.3.1 Class exploitation and racial oppression

In the previous section of Chapter 2, I shared Omi and Winant's (1994) view that race categorisation of human bodies, for example in America, was deliberated by sociohistorical processes that supported hierarchical inequality which brought meaning to race. Within the South African context, specifically, one view is that hierarchical inequality was prevalent throughout colonisation *and* later, legitimised by apartheid by deliberating race to maintain and sustain white supremacy. Magubane (1979: 15), for example, is of the view that the beginnings of a racial structure in South Africa stemmed from class exploitation, rooted in power dynamics. Magubane (1979: 16) accounts capitalism as the power dynamic that initiated and embedded class exploitation and racial oppression. In Magubane's (1979: 16) view, racial oppression is inseparable to a capitalist power structure.

Magubane (1979: 17) reveals a genesis of racial oppression and class exploitation as contextual background, and how these forms of subordination were used as powerful weapons for capitalist benefits by dominant political and economic forces. For example, Magubane brings to mind the period of 1652 to 1806 when a trading company, called the Dutch East India Company (DEIC), ruled South Africa. The DEIC had a strong political and economic influence that exploited African societies, such as the Khoi and San in Southern Africa, for their cattle and land. African societies, such as the Khoi and San, who were generally in conflict and cooperation with one another for their economic growth, were now, also at the mercy of the DEIC. According to Magubane (1979: 30), within the first few years of the Dutch settlement, the Khoi were brutally killed and impoverished of their cattle and land; their only hope of surviving was in "servitude, confinement and cultural suppression" to the Dutch. The working-class employees of the DEIC settled in the Cape alongside

the new arrivals of French Huguenots. An intermarital group of Dutch and French Huguenots gave rise to a new group called Afrikaners (Magubane, 1979: 31). Following, the Afrikaners found their 'wealth' in a subsistence economy and enslaved people of African societies for their labour, taking their slaves with them as they trekked further north.

By the time the British lost their colonies in America to France, they began to redirect their attention to the East, creating a need for a halfway station in the Cape. The British annexed the Cape from the Dutch in 1806 and settled in the Cape from 1820, bringing with them a perceived 'civilised' culture that was imposed, not only onto the indigenous African societies but also onto destitute Afrikaners. According to Magubane (1979: 34), the British settlers brought with them the idea of "private property and acquisitive principles associated with capitalism". A subsistence lifestyle of the African and Afrikaner farmers provided opportune timing for subsistence capital for the British capitalists. Problematically for the British, the slaves of the Afrikaners minimised the supply of African labour to support British capitalism, causing conflict between the British and the Afrikaners. The abolition of slavery in 1833 affected the Afrikaner ownership of slaves; unsettled by the British, the Afrikaners trekked idealised by the Afrikaners as *The Great Trek* (Magubane, 1979: 43).

The discovery of gold and diamonds in the last quarter of the 19th century directed Britain's economic attention to the interior of South Africa, resulting in increasing wars with African societies for land, pushing indigenous tribes; such as the Xhosa, the Zulu and the Sotho; further to the east and the north (Magubane, 1979: 46). The interior, which had been a burden to the British, became an opportunity of economic wealth to the British. It is worth noting that the German annexure of South West Africa in 1884, followed by the Second Anglo-Boer War (1899–1902), seeded further Afrikaner retaliation against British supremacy by 1910. From my perspective, it is therefore important to pause and consider a theory of colonialism inclusive of class exploitation and race oppression in the South African context.

Wolpe (1988: 24) proposes a theory of colonialism, which he refers to as a 'colonialism of a certain type' in South Africa. He states that racial domination is not in opposition to capitalism; instead, race domination is "a condition of capitalist development in South Africa". This means that race and class are not opposites to each other; neither are they independent of each other; instead, race and class are intertwined (Magubane, 1979: 15). Wolpe (1988: 24) rejects the view that white domination lies outside of the realms of the economy. He believes that a lack of consideration of the pivotal role of the economy removes the social, political and economic relations between and within racially defined groups. Wolpe (1988: 25) believes that if one chooses to ignore a capitalist

economy, then one automatically assumes that social relations amongst human beings are attributed to membership of particularised racial groups, which, in his view, is a false assumption. Wolpe's (1988) proposition, therefore, concurs with Magubane's (1979) view that social relations were attributed to capitalist needs by, for example, the accumulation of cattle and land, and later minerals, by the subjugation of African societies in return for their enforced labour. My view is that the colonialists used their experience of race oppression from previously colonised lands to divide and exploit African societies to further their imperial wealth in South Africa, which is in accordance with Magubane (1979: 224) that colonialists portrayed a sense of entitlement to the land and labour of 'inferior' races.

Wolpe (1988: 29) describes 'colonialism of a certain type' (or internal colonialism) as the coming together of two theoretical and two political standpoints, which appear to differ from one another but are closely related to one another. The first theory is based on the concept of race, which provided a political platform for African nationalism in South Africa. The second theory considers capitalism as a South African construct embedded as a part of a bigger imperial system, which led to the politics of a class struggle. Wolpe (1988: 29) continues that internal colonialism was first used in the South African context by Leo Marquard in 1957 who described the colonial structure of South Africa as independent of the South African economy. Wolpe (1988: 29) builds on the description of Marquard by articulating that 'colonialism of a certain type' "defines the co-existence and articulation of a colonial relation between black and white people and a developed capitalist economy within the confines of a single national state". Leading to the Union of South Africa in 1910, South Africa had already been held captive to the capitalist shackles of the British Empire, which, Wolpe (1988: 29) continues, "vested in a white state and a racially exclusive political system", further embedding and promoting the subjugation of African societies for their capitalist greed. On the one hand, there was a white well-developed capitalist state equivalent to states in Europe and, on the other hand, a colonised mass of under-developed (in terms of European capitalism) African societies experiencing exploitation and oppression.

The passageway of a white South African capitalist state and the remaining African impoverished masses was, according to Wolpe (1988: 30), apartheid (discussed later). In other words, Wolpe (1988: 31) was skillfully able to theorise a 'colonialism of a special type' in South Africa, which highlighted how race domination and oppression were used as conditions for capitalists to accumulate wealth through an "inter-penetration of capitalist exploitation". By inter-penetration, Wolpe is referring to an asymmetrical class structure between whites and blacks – that is, two different class structures that had no equivalence to each other, but class structures that promoted capitalism through the massification of the subordination of blacks.

2.3.2 Influences of Christian nationalism

The Second Anglo-Boer war (1899–1902) has generally been considered as one of the turning points in the rise of Afrikaner nationalism in South Africa. The Afrikaners lost approximately 26 000 Afrikaners to the war, approximately 22 000 of which were women and 4 000 children (Jansen, 2009: 67), many in concentration camps. The war was viewed as an ignominy of Afrikaner identity. Alternatives to opposing British imperialism was sought; and influential intellectuals, both in South Africa and Western Europe, played pivotal roles in the formulation of the apartheid ideology. In South Africa, in particular, perspectives by Afrikaner nationalists, theologians of the Dutch Reformed Church, and the Afrikaner Broederbond were gatekeepers to apartheid theory.

In the view of Afrikaner nationalist intellectuals, British imperialism spawned political disempowerment of the Afrikaners, excluded their Afrikaans language and turned a blind eye to an increasingly poor-white Afrikaner population (Dubow, 2013: 210). From the perspective of theologians of the Dutch Reformed Church, separate mission churches, based on their views of human differences, needed to be structured into a neo-Calvinist framework (Dubow, 2013: 211). By 1933, the executive council of the Afrikaner Broederbond proposed ‘total mass segregation’ – that is, separate settlement areas to accommodate different tribes, and to accommodate temporary migrants and Africans in urban areas (Dubow, 2013: 211). Collectively, the intellectual collaborators theorised and actualised apartheid to accommodate their views of human difference.

Dubow (2013: 217) forwards that a unique vehicle of persuasion for an alternate view of human difference in South Africa was Christian nationalism, which Dubow describes “acted as a self-referential discourse, a coded vocabulary of imperatives and shibboleths which could be, and were, constantly reinterpreted in the light of political realities”. Afrikaner theoreticians deliberated a scriptural interpretation by the Dutch Reformed Church coupled to ideas of a ‘true’ nation to promulgate human difference.

Firstly, a federal Dutch Reformed Church necessitated a missionary policy in the mid-1930s, to establish relationships between the Afrikaner Dutch Reformed Church and its affiliates, thereby creating segregation between the affiliates themselves, and seeding subordination relative to the Dutch Reformed Church (Dubow, 2013: 214). The policy can be viewed as a controlling mechanism from the perspective of the mission churches. However, from the perspective of the Dutch Reformed Church, they were overseeing their separate mission churches for practical and historical reasons.

Secondly, the Dutch Reformed Church used the Bible as proof of God’s will – that is, the perception to keep together that which had been unified by God and keep that which had been

separated by God, apart. Various renowned theologians described this cultural essentialism as a justification for separate 'nations' (Dubow, 2013: 218). Opposition to British imperialism and perceived liberalism paved the way for the Afrikaners detesting individualism and supporting selective collectivism.

Thirdly, Dubow (2013: 218) pointed out that Kuyper, a leader of the Dutch neo-Calvinist Movement, introduced the slogan, "*sowereiniteit in eie kring* (sovereignty in own sphere)", which differentiated levels of existence into the state, society and church. From Dubow's perspective, Kuyper's differentiated levels were essential as it postulated that each of the three levels was, separately, answerable to God. By creating separate boundaries. Kuyper was justifying an Afrikaner *volk* (nation) that was willed by God, and his gateway to promote a separate *volk* for an Afrikaner group in South Africa. Also, key Afrikaner nationalists furthered their study in Germany before the Second World War. Returning to South Africa, the nationalist intellectuals advocated sympathy towards Nazi Germans, latching onto the nationalist view of a Nazi *volk* as a superior collective, drawn by a 'pure' and common culture (Dubow, 2013: 219). Following, Afrikaner nationalists promoted *volk* as collective supported by a natural link between *volk* and culture. This reasoning supported the Afrikaners' opposition to miscegenation, an act viewed as the impurification of the *volk*; and increasingly supported by eugenics literature.

Opposing views amongst the Christian-nationalist intellectuals regarding relatedness between race and culture, and its spiritual connectedness, slowed down the process of a scripturally-led apartheid Bible (Dubow, 2013: 221-222). The dilemma, in the case of the Christian-nationalist intellectuals, was how to justify human difference between races that was acceptable with minimum world criticism while, at the same time, maintain human difference. Following, it was the Afrikaner solidarity and their mystical relay of an Afrikaner past, and future, that naturalised and sealed apartheid ideology, justified by historical heroism, tradition and the experience of a unified Afrikaner *volk*.

2.3.3 'Science' as a motive to oppose miscegenation

Dubow (2013: 209) voiced that, during the period between the 1930s and 1950s, white Afrikaners in South Africa used a particularised biological concept of race to describe their views of human difference. Instead of the normative scientific view of race as biology, as referred to by Appiah in my earlier writing of this chapter, some Afrikaner intellectuals were drawn to eugenics literature that contested miscegenation. Unlike the British, who were regarded as settlers in South Africa, white Afrikaners considered themselves as native to South Africa, having adapted and acclimatised to the landscape over centuries as their homeland.

Towards the end of the 19th century, fear of miscegenation may have been facilitated by British eugenists in South Africa. British interest in eugenics was mainly from medical doctors with political motivations of serving their imperialist motherland by maintaining control of South Africa (Klausen, 2007: 36). From a British perspective, Klausen (2007: 28) believed there were concerns for the deteriorating well-being and health of Afrikaners, as a white race. The social and economic conditions of 'poor white' Afrikaners in urban areas were on the decline, and the additional factor of a growing black urban population bred conditions for either conflict or alliance between impoverished 'poor whites' and black groups. In addition, Klausen (2007: 32) is of the view that the British were looking for ways to strengthen a white race, using eugenics and political discourses to increase the "quality and quantity of the European population" in South Africa. White Afrikaners were a likely option to increase a white race.

Amongst British intellectuals, were Afrikaner intellectuals, such as Gerrie Eloff who latched onto the idea of eugenics, convincing fellow Afrikaners that miscegenation was a particular scientific problem (Dubow, 2013: 227). Eloff was a follower of Eugen Fischer (1874–1967), a prominent German (racist) eugenist and anthropologist, who supported the German race-hygiene movement. The German race-hygiene movement promoted eugenics as a "means to create a healthier, more productive, and hence more powerful nation", intending to ensure hereditary fitness of a German race (Weiss, 1987: 195). Weiss (1987: 198) reveals the influence of August Weissman's 'germplasm theory', which conveyed that the transmission of heritable information occurred via germ cells (biological cells that fuse during sexual reproduction). Together with the increasing popularity of social Darwinism's 'natural selection' theory in Germany, the amalgamation of the two theories led some scientists to believe that the *selection* of humans (as nations) for reproductive purposes was key to race purity and perseveration. This was contrary to the belief that the preservation of a race lay within strengthening the mental and physical abilities of people within the race itself, adding the extra criterium of sexual reproduction.

According to Dubow (2013: 227), Eloff convinced Afrikaner intellectuals that hybrids of miscegenation of white and non-white races could lead to "mentally, physically and morally inferior" hybrids of humans, relative to white persons. Eloff added that white races were permitted to mix with each other to maintain healthy hybrids, while non-white and white races would reproduce hybrids of poor health (*ibid.*). Hybridisation was problematic since Eloff envisaged Afrikaners as a "distinct biological race" (*ibid.*), and a 'true' nation. Klausen (2007: 29) captured a critical point of a shift in the perspective of race in the 1900s: Concerns surrounding health and well-being differences of white British versus white Afrikaners evolved into concerns relating to white Afrikaners versus non-whites. In other words, the 'science' of miscegenation transformed the

eugenics discourse in South Africa from intra-white to a focus of white versus non-white. The significance of this point is that British and Afrikaners, as a white race, saw a benefit in aligning themselves as a collective; to maintain a perceived mental, physical and moral superiority in relation to non-whites (Klausen, 2007: 32), despite the Afrikaners' anti-imperialistic views. The idea of the purity of race, as well as the rejection of miscegenation, was fundamental to Geoff Cronje, a racial theorist, who was the first to lead a "systematic elaboration of apartheid theory" in a series of books (Dubow, 2013: 229) and, who has since been considered as "the foremost academic protagonist of race purity thinking" in South Africa (Jansen, 2009: 140).

2.4 UNDERSTANDING APARTHEID IDEOLOGY

The class exploitation and the racial oppression imposed for centuries by European supremacists bred from the high-ground of capitalism (Wolpe, 1988: 24), and increasing influences of Christian-national Afrikaner intellectuals and their obsession with white racial purity, conceived an ideology of apartheid in South Africa. Magubane's (1979) view of ideology is thought-provoking in understanding the history of South Africa from colonialism to apartheid. Magubane (1979: 221) states that ideology is indicative of the intentions of "the articulate classes and the spiritual character of a particular class's rule". His view brings to mind the ruling classes of European supremacists during colonisation, and the quest for power by the Afrikaner Christian-nationals in the lead up to apartheid. As I pointed out earlier in Chapter 2, Klausen (2007: 32) believed that the British imperialists, in particular, and the Afrikaner intellectuals saw an opportunity to unify a white race, as allies, to promote white superiority relative to their non-white counterparts. While there was a 'willingness' to exchange power from the British to the Afrikaners in 1910 during the formation of the Union of South Africa, the exchange of power came at the expense of the Afrikaners in favour of the continuation of British access to the South African economy. As such, the British parliament made political decisions in trusteeship with leading Afrikaners, such as Jan Smuts, an internationalist and a promising prime minister for South Africa in 1910. The Union, or compromise with the British, had economic implications of a continued subordination of the Afrikaners in South Africa (Magubane,1979: 229).

After 1910, the class and the racial structures imposed by the British remained present with one key difference, namely, the inclusivity of some political power to the Afrikaners. While the Afrikaners had challenged the ideology of British supremacy, the details of political power were merely altered so that the ideology of white supremacy could be maintained. A new equilibrium of white supremacy was reached as an ideology of apartheid to encourage human separation and segregation further. A larger ruling class, consisting of politically charged Afrikaners and economically-driven British, came into being. Following, the ideology of apartheid was 'sold' by Afrikaner intellectuals,

in the shadows of British greed, as cultural essentialism in order to justify and later legislate separation and segregation in South Africa (Dubow, 2013: 209).

In 1948 the National Party came into power under the leadership of Daniel Malan who began to implement an apartheid doctrine. According to Wolpe (1988: 66), a doctrine of apartheid, amongst many other reasons, was an Afrikaner solution to protecting Afrikaner farmers and a white working class, redirecting Afrikaner opposition to non-whites. Through the lens of the Afrikaner, non-whites were increasingly becoming an economic threat to white farmers and urban white labour. From my perspective, the economic threats suggest that the Afrikaners too had synergy with capitalism. In other words, threats of non-whites were, in fact, economic threats for capitalist reasons; while the ideology of apartheid was politically driven, the justifications for separation and segregation were mainly for economic reasons (Magubane, 1979: 237). The 'strength' of apartheid ideology was that its venom, whether for capitalist gains or colonial exclusion, was intended to poison *all* institutions so that *all* of society would be led to believe that inequality was a normal phenomenon (Magubane, 1979: 222). Subsequently, political institutions that advocated the right to vote and the right to parliamentary membership, as well as economic institutions who had decision-making power on issues such as land ownership, judiciary and skilled jobs (and education) were reserved for whites, with no or limited access to non-whites (Wolpe, 1988: 62). It is, therefore, unquestionable that inequality became a way of life for South Africans.

2.5 RACE (DE)CONSTRUCTION IN POST-APARTHEID SOUTH AFRICA

2.5.1 The (un)known non-racial South Africa

While the Constitution of South Africa foregrounds non-racialism at its core, Everatt (2012: 6) is of the view that an understanding of non-racialism has not come to fruition in the eyes of ordinary citizens in post-apartheid South Africa. He continues that the extent to which ordinary South Africans do not understand non-racialism is revealed by their responses as if they were asked questions about race and racism. Perhaps their preference to answer questions regarding race and racism are partly due to the deeply engrained lived experiences of the effects of race and racism during apartheid, and the continued use of an apartheid regime's inherited race classifications in government and non-government institutions during post-apartheid South Africa.

In part, Ansell (2006: 340) is of the view that the removal of juridical racial barriers was a significant dilemma for the post-apartheid government as the new government needed to implement equity and redress strategies for a first democratic South Africa. The democratic government's strategy was to re-introduce racialised categorisations as a means to identify and support those who were previously marginalised. However, inherited race classifications culminated into a bartering

exercise between ordinary citizens (without their consultation) and government institutions (and NGOs) in order to implement equity and redress. In my view, ordinary citizens were misled by the 'garment' of non-racialism threaded with racialised categorisations. Therefore, as Bass, Erwin, Kinners and Maré (2012: 31) point out, race classifications (whether for equity redress or not) makes it difficult for ordinary citizens to view race as a social construct and 'not real', and creates confusion amongst ordinary citizens. In Goldberg's (2009b: 532) words, "[n]on-racialism, [...], like the emperor's clothes, is what the state wears to represent itself to the world". Like the emperor's clothes, a non-racial South Africa is left for ordinary citizens to imagine non-racial as real, to decipher it on their own, with very little or no political directive from the government.

Everatt (2012), Bass *et al*. (2012), and Ansell (2006) suggest that there has generally been no clear definition of the term non-racial in post-apartheid South Africa. Moreover, without a directive definition from the government, therein lies a danger or perhaps an opportunity to re-visit or re-construct race. A non-racial South Africa was perhaps more of an abstract undertaking than anticipated by debates surrounding the national struggle in opposition to and during apartheid (Jordan, 2016). Maré (2003: 15) concurs that the national struggle, at a general level, either accepted different races or "did not examine how the construction of the racialised-self and racialised-other would affect the process of the struggle and the post-apartheid future". In my view, amongst others (Bass *et al.*, 2012; Everatt, 2012; Maré, 2003; Soudien, 2016), the meaning of non-racialism on the ground, amongst ordinary citizens, is necessary because of the lack of an agreed understanding of non-racialism in South Africa.

2.5.2 Multi- (non-)racial and the African National Congress

To begin to understand the term 'non-racial' in the South African context, it is useful to share one of the political challenges confronted by the African National Congress (ANC) in the 1950s, the leading opposition to the proponents of apartheid, and the ruling party of the first democracy in 1994 of post-apartheid South Africa. Soske (2015) provides a good insight into the problem regarding the ANC's positionality in the 1950s, both within South Africa and a larger Pan-Africa. Soske (2015) tracks the history of the evolution of ideas of the political terms non-racial, non-racialism, multi-racial, and multi-racialism in order to best understand the evolution of non-racialism in the South African context. The critical question, in my view, is whether the term non-racial was, and continues to be, an antithesis of race classifications in South Africa, whether non-racial is interpreted as the removal of racial inequality in South Africa or if non-racialism sits within an alternate spectrum. In my view, understanding the varying perspectives of non-racialism from the leadership of the country locates the national identity of South Africans. It is also telling of the positionality of race within a 'rainbow nation' (a term officiated by Archbishop Desmond Tutu

when he was awarded the Nobel Peace Prize in 1984). In 1993, the leader of the ANC and later president of South Africa, Nelson Mandela was also awarded the prestigious Nobel Peace Prize for his contribution towards an end to apartheid and laying the foundations for a democracy.

On the ground, Ndebele (2002) stated that the ANC's membership was continually challenged as an African-only organisation (those classified as black in South Africa) both in South Africa and amongst exiles abroad. Ndebele (2002: 134) continued that non-racial membership of the ANC was only accepted in 1990, seventy-three years after its formation in 1913; before that, it remained a contested all-African and partially-African organisation. Ndebele (2002: 144) continues that it was in 1969 that membership was permitted to non-white racially classified groups, partially because non-Africans were, increasingly, becoming more 'valuable' in the national struggle for liberation. Ndebele (2002: 134) added that an increase in pressure from an exile community and the alliance between the ANC and the South African Communist Party led to a shift to non-racialism politics.

Additionally, in the 1950s, Tom Mboya, demonstrated antagonism to multi-racialism in Kenya, which was viewed by Africanists as key to British colonial policy, rejecting the idea of racial subordination interpreted as specified groups having fewer rights within a state (Soske, 2015: 17-18). Further, Mboyo promoted equality of individuals that allowed each to pursue their potentiality; he rejected the British liberal assumption that the 'enemy' was the "bourgeoisie civil society" that promoted the superiority of European civilisation above Africans as a presupposition to democracy. In turn, Mboya created the understanding that an African democracy relied on African nationalists, and not defenders who were co-creators of racialised thoughts. Soske (2015) believed that the change of mindset, articulated by Mboyo, challenged the ANC as proponents of multi-racialism.

Albert Luthuli, the leader of the ANC in the 1950s, endorsed a "broad Pan-African (rather than a narrow 'black') nationalism … along constructive lines … while upholding a multi-racial image of African nationalism" (Soske, 2015: 25). Consequently, Robert Sobukwe, an Africanist and member of the ANC, denounced his association with the promotion of multi-racial groups (Sobukwe included 'coloureds' as Africans) forming a new pan-African movement, the Pan Africanist Congress. By 1959, Congress Alliance activists began to use the term, non-racial, in their plight for democracy; and in 1960, Luthuli announced the ANC's stance of a South Africa as a "multi-racial society and non-racial democracy" (Soske, 2015: 27), thus creating a conundrum within South Africa and an Africa in the process of decolonisation.

Maré's (2003: 21) words sum up the conundrum of the ANC: "Non-racialism was the commitment, but races remained the building blocks … [of] the theoretical and strategic thinking that informed analysis and practice within attempts to restructure society". Returning to my critical question on

whether the term non-racial is an antithesis of race classifications, the answer remains unclear. Maré (2003: 13), however, gives some insight into a possible reason to an unclear answer stating that "non-racialism has remained unrealisable because there was no serious theoretical investigation of the status of race categories, either how they operated within apartheid South Africa or within the struggle for democracy itself". Maré's view may be accurate, but it is also disturbing because it may have consequences of South Africans returning to what they know from apartheid: racial classifications. I will also be bold in adding that Luthuli's 'multi-racial society in a non-racial democracy' may continue to be evident in the actions of the ANC post-apartheid.

2.5.3 Race as colour-blindness

It is useful to begin with the equivalence of non-racial as colour-blindness as it is rooted in liberal non-racialism, practised in the Cape Colony from the 1850s, when the African elite was permitted to vote, based on their acquisition of "Western education, conversion to Christianity, degrees of 'civilisation' and private (not communal) property ownership" (Erasmus, 2012: 37). A blind eye was turned to race in the Cape Colony when votes were needed in what became known as 'the non-racial franchise' (*ibid.*). According to Soudien (2016: 142), the perspective of current proponents of colour-blindness is that race is not 'visible' and, subsequently, it is not possible for its advocates to be viewed as racist. Soudien (2016: 142) refers to proponents of colour-blindness as multiculturalists relaying that the problem of racism was and remains, in their view, a social issue that could be changed behaviourally.

In my view the argument for colour-blindness is weak as denying the existence of racial hierarchies during apartheid and in post-apartheid South Africa is equivalent to denying that racial oppression and its interlinked class exploitation exists in South Africa. For example, the report *Whither a demographic dividend South Africa: The Overton window of political possibilities* by Statistics South Africa (Lehohla, 2017), showed "poverty as extremely low amongst whites (0,4%) and Indians/Asians (1,2%) in 2015, whereas it was much higher amongst 'coloured' persons (23,3%) and a staggering 47,1% amongst black Africans" (Lehohla, 2017: 32). Between 2011 and 2015, poverty decreased amongst white persons and Indians/Asians, whereas it increased amongst 'coloured' persons and 'black' Africans. The trajectory between 2011 and 2015 indicates that there remains some correlation between 'coloured' persons and 'black' Africans and poverty.

In America, non-racialism has the connotation of 'everything is fine', and the solution lies in not bringing up race (Erasmus, 2017: 48). Crenshaw (2009: 619) brings the American experience of oppression to the attention, which led to increased racialised consciousness of an 'other'. She articulates two forms of oppression of the 'other' (I would add an invisible 'other') which led to

race-consciousness in the lead to the civil rights movement in America: symbolic subordination and material subordination. Crenshaw describes symbolic subordination as socio-political inequalities that ignore the achievements of the 'other' by deliberately segregating and excluding the 'other' in ordinary social activities – propagating an inferiority of an 'other'. She describes material subordination as the deliberate segregation and exclusion of state-propagated economic inequalities, which lowers the life opportunities of an 'other'. The point I want to make is that an invisible 'other' is as vulnerable to oppression as a racialised 'other', particularly from the stance of hierarchical racialised political systems, as encountered in South Africa and America.

2.5.4 'Joint culture' and recognition of racialised identities

Xolela Mangcu (2015), a sociologist, builds on the idea of Luthuli's 'multi-racial society in a non-racial democracy' to read as a 'multi-racial society in an anti-racist democracy'. He also draws on the ideology of Stephen Biko, leader of South Africa's black consciousness (BC) movement. Firstly, Mangcu (2015: 10) emphasises that his view of a multi-racial society should not be confused with race as biology or cultural essentialism; instead, his view of a multi-racial society is in support of the recognition of people's racial experiences and their "contestation and reformulation of imposed racial essences to create new identities". Mangcu (2015: 10) brings to the attention the power that lies within the "processes of signification … as people engage with imposed identities" which, he believes, should not be underestimated. Mangcu (2015: 10) continues by arguing that the processes of the signification of oppressed people, does not necessarily include, using my phraseology, a 'Chapin diagram of logic', "even of the most powerful regimes". In other words, racial experiences vary according to rules of 'logic', which are created and administered by the experiences of racialised peoples themselves, not by rules of sense-making imposed by a regime. My interpretation is that a social and historical past need not trap racial identities but could also be reinvented by processes that may not make systematic sense, but continues to evolve as politicised identities.

Mangcu (2015: 11) draws on an example of the BC movement, which undermined the racial classifications of an apartheid system by replacing racial classifications with a political label of 'black'. To understand 'black', he quotes Biko as saying, "are all those who are by law and tradition, discriminated against and identify as a unit towards their aspirations" (Mangcu, 2015: 11). Like Biko, Mangcu (2015: 13-15) proposes a 'joint culture' – a culture that is seeded from oppression, rather than from an essentialist perspective where racial groups work together with collective intentions and grounded in a "broader African identity". The challenge, in my view, is how to achieve a balanced 'joint culture' in a country where oppression is spread unevenly across racially classified groups and, as importantly, to whom this 'joint culture' would be accountable.

'Joint culture' will, inevitably, reveal new challenges of power when decisions need to be made on collective intentions. Mangcu also opens up an old wound of the make-up of African identity and who the decision-makers are in this regard. Erasmus (2012: 39) asks a thought-provoking, and unanswered question, "[I]n which ways [of assimilating into a joint culture] would power work differently from the way it works in assimilation today?". Following on this, I ask, how will assimilation into an African identity be different from colonial assimilation of European-ness?

Soudien (2016: 141) finds the view of non-racial with recognition to racial identities problematic. For Soudien, the neutrality of the term race as proposed by Mangcu is problematic and similar to the view to liberal proponents of colour-blindness. At the same time, Mangcu's stance also has tendencies towards a positive connotation to race. Later in this chapter, I have discussed in much detail, Soudien's (2013) opposition to a positive inscription of race, which he refers to as 'redemptive realism'. Soudien (2016: 145) is clear that Mangcu's proposition of anti-racism assumes the existence of race, the same term that Soudien says, propagated "bodies [as] … containers of values, meanings, capacities and potential". At the same time, I am also aware that the racial identities, intentional or non-intentional, rooted in regimes or rooted on one's own accord, cannot be dismissed in post-apartheid South Africa.

2.5.5 Race as 'redemptive realism'

According to Soudien (2013: 16), in an attempt to understand the composition of race in South Africa, on the one hand, and its everyday functionality in the lives of people, on the other hand, a contemporary confusion of race as 'racial realism' has been created. Racial realism argues for an acknowledgement of the reality of race as a means to achieve racial justice (Soudien, 2013: 16). Racial realists believe that a strategic mechanism for racial justice is to make use of race as ammunition to fight racism. Despite race having been shown as not real, it continues to be viewed as part of one's identity (Soudien, 2012: 19).

An emerging view of racial realism is what Soudien (2013: 16) refers to as "redemptive realism". Redemptive realism is an extension of racial realism. However, it postulates a positive concept of race to compensate for the negative representation of particularised races. Redemptive realism is perhaps a similar view proposed by Du Bois in one of his early essays, *The conservation of races* (1897), when he hypothesised the future of the Negro[5] as a positive contributor to humanity and civilisation. Du Bois (2009: 106) viewed the Negro as a unique race that he hoped would be

[5] Terminology used in Du Bois' essay, *The Conservation of Races*

compared with races (civilisations) such as the Egyptians, Indians, Greeks, Romans, Teutons and Mongolians, following the end of slavery. Like redemptive realism, Du Bois affirmed Negro as a race, from a positive standpoint to redeem the Negro, demanding racial equality in opposition to white racism.

The second example of redemptive realism is proposed by Soudien (2013: 31) as the view of Spivak in her essay, *Can the subaltern speak*? In the context of Spivak's (1988) positivist stance, she argues that historians, for example in India, documented the history of India without including the voice of the subaltern, which she believed necessitated a change. Spivak's view is perhaps similar to Fanon (2008: 8) in his thesis, *Black skin white masks,* when he remarked that "to speak is to exist absolutely for *the other*" which I interpret as to speak is to declare one's existence to another. If one is disallowed to speak or if one is spoken for by another, linguistically, then a feeling of non-existence is created by another. Extrapolating this view to Spivak's (1988: 24) positivist stance may imply that the subaltern, the "[s]elf's shadow" as Spivak puts it, may not be heard from the voice of the subaltern. For the voice of the subaltern to be documented historically and by themselves, the voice of subaltern requires a hearing. In other words, to defeat discrimination requires the voices of those marginalised to be heard.

Soudien (2013: 27) argued that a positivist stance on race, such as the example I described of Du Bois (and the subaltern of Spivak), creates an illusion of objectivity and neutrality of race (and in my view of the substance of subaltern groups) that can comfortably be filled with positive content to fight racism (and subaltern-ism). Firstly, Soudien holds the belief that using race, as an example, to fight racism, essentialises race, independent of the reasons, and inevitably, leans towards re-creating race as a fixed natural entity. Secondly, Soudien challenges redemptive realism because he believed that its socially constructed essentialist stance of blackness and whiteness reduces the complexity of the lives of humans in an attempt to place attention on fostering BC, and homogenising whiteness as its opposition. My view is that focusing attention on those marginalised, not necessarily by race, allows for the complexity of their lives to be voiced, heard and documented, concurring with Spivak's idea of strategic essentialism.

2.5.6 Non-racial as a 'radical ontology'

Soudien's (2016) view of non-racialism is in contrast to colour-blindness, 'joint culture' and racial identity, and 'redemptive realism' in post-apartheid South Africa. Soudien's (2016: 141) addendum to a conference held in honour of Neville Alexander in 2013, focused on his views about the "the political significance of non-racialism for a political action against racism", which may give further insight into the latter part of my critical question: Does non-racial interpret as the removal of racial

inequality in post-apartheid South Africa or does non-racial sit within an altogether different spectrum?

According to Soudien (2011: 44), Ben Kies and Neville Alexander, as examples, led a project of non-racialism that was radical and intellectually different compared to race and identity theorists in the 1930s. A social theory, contextualised to the interwoven intricacies of the experience within a local situation, like the alternate complexities of the southern hemisphere, became a pipeline to a theory of non-racialism. Soudien's (2011: 45) stimulus is the work of Connell (2007), who shows to be unwavering in her plight to critique theories from the northern hemisphere that were normalised as appropriate for the south. In the context of Connells' plight, Soudien (2011: 44) argued that Kies and Alexander's distinct contributions to intellectual knowledge and knowledge production, and their understanding of their history and contextual environment, are significant. Of equal significance, is that knowledge production, stemmed by intellectual activists, was asserted and developed outside of the academy and rooted in the conditions and voices of local people.

Soudien (2016: 133) puts forward that Alexander was key to knowing how non-racialism could have an awareness of complex differences for the inclusion of an ethical life, which Soudien refers to as a 'radical ontology". Soudien (2016: 133) continued that Alexander's non-racialism, is somewhat of a philosophical stance of "moving into the uninhabited zones of the consciousness and … explor[ing] there its desires and prohibitions". In this zone, Soudien (2016: 145) believes, the opportunity for solidarity and one's sense of belonging can be found – not in a racial identity as proposed by Mangcu (2015), but in a power of the mind and the mind's agentic nature. Race, for Soudien (2013: 17), is an "empty concept - its 'visibility' lies in the effect of an ideology".

For Soudien (2016), the question of non-racialism becomes a question of politics in a much more profound manner than the theorisation of non-racialism. I think Soudien's view is partly due to the lived experiences of the effects of race and racism, but also, as Alexander suggests, a sense of 'not knowing' the determining factors in the history of South Africa. This emptiness of 'not knowing' can be filled with whatever makes sense at a particular time, which, in turn, can influence ways of being, particularly as the entrapment of race. Alexander (Sizwe, 1979: 51) makes the point that people's actions are influenced by their interpretations of what they see, and how they interpret what they see, gives an insight into how they see themselves.

Soudien noted that a contemporary 'feel' of non-racialism, and how it engages with one's ontology appears to be absent in post-apartheid South Africa. He asks a challenging question: How does non-racialism in contemporary South Africa position itself within the complexity of the politics of the

self as well as the politics of the sociological collective? On the one hand, there is an evolutionary journey of the self, and on the other hand, there is a need to belong to an extended self.

From my perspective, the question that Soudien poses is threefold: political, ontological and ideological. Soudien (2016: 148) believes that the "ideological grip [of race] on the popular imagination, and the effects it induced" was the target of Alexander and his colleagues. Alexander saw the need for a framework that could explain ideology that could transcend the content of the minds of people from 'not knowing' to 'knowing'. Questions of identity and identity construction become relevant, in the space of pursuing an understanding of what it means to become a fulfilled human being with unconditional dignity, rather than only a racialised human being. The shift away from racial identity to unconditional dignity is Alexander's politics of non-racialism; people's ability to interact with the conditions they find themselves, informed by history but not engulfed by it, and to think their way, consciously and with deliberation, out of the "ideological grip" (Soudien, 2016: 148). The emptiness of 'not knowing' becomes a 'knowing' when there is an understanding of the construction of social environments, an understanding that can be obtained by re-schooling the mind of the individual to escape essentialisms such as race; a kind of 'knowing' that has ethical implications for individuals (Soudien, 2016: 157-159). In answering the latter part of my critical question, it appears that the removal of racial inequality may be positioned within an alternate spectrum, one that requires a consciousness that encompasses individualised ethical responsibilities that demand a re-learning and re-construction of identities that forbid the existence of race.

2.6 CENTRALITY OF RACE IN SOUTH AFRICA

2.6.1 Politics versus values, principles and social commitments

In Chapter 2, I indicated that, in South Africa, race positions itself, prominently, as a centrepiece within a historical continuum from the period of slavery and colonisation, to apartheid and post-apartheid. On the one hand, I am drawn to the writing of Mangcu (2015) who vied for a reality of race driven by a need to establish the dignity of those whose ancestors, and who themselves, had been dehumanised as a consequence to racial subordination and oppression.

In Mangcu's (2015) view, race as 'real', is an issue of anti-racism. The 'joint culture' that Mangcu proposed included embracing one's racial identity as a deliberate act of one's opposition to racism. Racial identity is essential to Mangcu because, in his view, racial experiences are seeded in the experiences of subordination and oppression. I cannot deny that one's lived experiences of apartheid and the effects of apartheid, such as the oppressive regime of a socially, economically and politically driven system of racial separation and segregation, however self-interpreted, cannot be denied. I want to extend Mangcu's reality of race as a reality of racial classification as, for me,

racial classifications brought, and continues to bring meaning to a perceived racial difference in South Africa. While the ideology of race had already been in place by the time the apartheid regime legitimised race, race classifications concretised race further. While race classifications concretised race, I believe that race cannot define who we are as individuals, and, in this light, racism should be contested.

I am also consciously aware of Wolpe's (1988: 31) view of an asymmetrical class and race structure that aimed at promoting capitalism by the massification of subordination of particularised races in South Africa. Wolpe (1988: 24) brought to my mind the pivotal role of the economy and, if removed from the conversation of race, removes the social, political and economic relations between and within racially defined groups. In my view, Wolpe's perspective of an asymmetrical class structure to promote capitalism continues to be prominent in post-apartheid South Africa; while race classification may not define us, race classification and class structures can influence whom we can become in South Africa.

On the other hand, I am drawn to the writing of Soudien. According to Soudien (2015, 2016), race is a vacuous concept. In his view, there lies a spectrum outside the centrepiece of race that strives for human dignity. He believes this is achievable by a re-schooling of the individual's (racialised) mind to a level of consciousness that deliberately disregards the conceptualisation of a racial 'other', and, instead, focuses on the achievement of one's potential. First, in my view, the experience of 'othering' cannot be denied. Being an 'other' affects us; it affects who we are or, more precisely, it affects who we think we are; as *the* 'other' or concerning an 'other'. Second, I am reminded of Spivak's (1988: 24) support of a subaltern 'other'. She emphasises that the voices of the subaltern 'other' *should* be heard and documented; not documented by those who hold hypotheses of a subaltern 'other' but documented by those who are allowed to self-represent their lived experiences too, in a way, to un-silence their lived experiences.

For Soudien (2013: 33), the positive stance on race creates an illusion of objectivity and neutrality of race, which he believes maintains the centrality of race. While Soudien does not deny that racism exists, he disavows a positive concept of race and proposes "unconditional respect – without the danger of essentialised ideas about who we are". While his view is noble, he does not provide an alternative for the voices of those marginalised by the effects of race classification and racism to be heard. The alternative that Soudien (2016: 145) suggests lies in the "values, principles, and social commitments" that he believes are good enough reasons to defend one's dignity. I cannot, however, pretend that racism does not influence the lived experiences of those who suffer this discrimination.

Moreover, I cannot ignore the political context of a multi-racial South Africa in which I find myself today.

2.6.2 Race classification in South Africa

My study is conceptually framed by race and race construction that were influenced by the history of South Africa, leading to apartheid, during apartheid and post-apartheid. Each of the participants in the study was born during apartheid and inherited a racial classification from their parents. According to Erasmus (2017: 88-89), the Population Registration Act 30 of 1950 (Union of South Africa, 1950a), legislated the recording of each person's race in South Africa as one of the following: White, native and 'coloured', with Indian as a sub-category of 'coloured'. Erasmus articulates that, under Section 1 of the Population Registration Act 30 of 1950 (Union of South Africa, 1950a), the classification of white was defined as "a person who in appearance obviously is, or who is generally accepted as a white person but does not include a person who, although in appearance obviously a white person, is generally accepted as a coloured person", which generally amounted to an amalgamation of Europeans and Afrikaners. The classification of native constituted a "person who in fact is or is generally accepted as a member of any aboriginal race or tribe of Africa". Erasmus (2017: 88) adds that the ruling National Party began to use a classification of Bantu, instead of native, and, under their rule in 1978, Bantu was officiated by the racial classification of black.

The participants of my study were racially classified as 'coloured' during apartheid. Under Section 1 of the Population Registration Act 30 of 1950 (Union of South Africa, 1950a), 'coloured' was defined, loosely, as "a person who is not a white person or a native; …". While the Population Registration Act was repealed in 1991, race categories continue to be used as a way to identify equity and redress, particularly in institutions that are required to comply with the Employment Equity Act 55 of 1998 (Erasmus, 2017: 91). The statistics of racially categorised groups, increasingly called population groups, are recorded by the government to monitor the progress of racially-labelled marginalised groups (Lehohla, 2017; Swartz, Mahali, Arogundade, Khalema, Rule, Cooper, Stanley & Naidoo, 2017).

The experience of race categorisation cannot be denied during apartheid and post-apartheid. During apartheid, race categorisation was legislated by social, economic and political systems that relied on the concretisation of hierarchical subordination and oppression. Also, the experience of race categorisation cannot be ignored in post-apartheid South Africa, used as a mechanism to identify and monitor equity and redress. From my perspective, race classification, bred from apartheid, has continued across a blurred boundary into post-apartheid that has positioned itself in the murky

waters of racial equity and redress. Race remains a deeply contested and a painfully controversial signifier of subordination and oppression. Jansen (2009: 171), for example, speaks of 'race' as if it is a 'knowledge in the blood' that is complex and "embedded in the emotional, psychic, spiritual, social, economic, political, and psychological lives of a community", which is telling of how deeply it has become part of who we are, despite our contestation.

2.6.3 Critical Race Theory

This study explores, in particular, a category of 'coloured' women, and, as I have argued above, requires a perspective of race in South Africa. Since I am deliberating a lens of race, I am positing Critical Race Theory (CRT) as a conceptual framework for this study. CRT acknowledges that western forms of knowledge relied and continues to rely on the exclusion of 'others' by speaking on behalf of 'others'. This theory gives voice to the otherwise silenced 'others' – 'coloured' women.

CRT was seeded by the critical legal scholars, Derrick Bell and Alan Freeman,who were displeased with the rate of progress of racial reform in America (Ladson-Billings, 1998: 10). The initiation of CRT stemmed from an earlier legal movement, Critical Legal Studies, which critiqued the mainstream legal ideology of meritocracy. Legal scholars, such as Bell and Freeman, were concerned with the lack of inclusion of racism as part of the critique of mainstream legal ideology. Early authors of CRT, such as Matsuda (1991: 1331), defined CRT as follows:

> *[T]he work of progressive legal scholars of color who are attempting to develop a jurisprudence that accounts for the role of racism in American law and that works toward the elimination of racism as part of a larger goal of eliminating all forms of subordination.*

Solorzano's (1997: 6) definition of CRT is an improved version of Matsuda's view as it directs one's attention to a structured approach and as a means of analysis, and defined as follows:

> *[A] framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyze, and transform those structural and cultural aspects of society that maintain the subordination and marginalization of [p]eople of [c]olor.*

Ladson-Billings (1998: 11-12), for example, critiqued the critical legal scholar movement because, firstly, she believed that racism was a normative practice. This new view could present a possibility to reveal various permutations of racism. Secondly, Ladson-Billings believed that storytelling, as experiential knowledge, should be a valued standpoint, and an analytical tool for the contestation of mainstream legal ideology. Thirdly, she believed that liberalism did not provide mechanisms for change; therefore, a critique of liberalism was necessary. Lastly, she believed that whites had been the sole beneficiaries of civil rights legislation in America.

My research question is contextualised by the women's primary and secondary schooling and their tertiary education. Ladson-Billings (1998: 11) suggests that the context within which racial oppression was experienced is an important consideration. The interpretations of each of the women's educational contexts differ from one woman to the next and, subsequently, there can be no neutrality or objectivity in the ways in which they choose to voice their lived experiences. Voicing lived experiences is complex, multi-layered and sometimes painful. However, voicing is needed to reveal and hear the cruelty of racial oppression.

Duncan's (2005: 101) interest in CRT is from the perspective that CRT "privileges the voices of those who bear the brunt of inequalities in society …, as opposed to analytic means, as the methodology to represent them". I concur with Duncan that, at times, the focus is on the analysis of the 'story' in question, instead of attentiveness to the (mis)representation of the 'story'. Of relevance in Duncan's (2005) quote is the social, economic, political and educational moments in which the 'coloured' women lived their 'stories'. CRT is an insightful lens into the formation of these 'stories'. Notably, the voices of the seven 'coloured' women in my study does not represent the voices of all women classified as 'coloured' in South Africa. Instead, this study's CRT lens yields an exploration of a problem-centred theory of inequality regarding 'coloured' women as professional mathematics educators in higher education South Africa.

2.6.4 CRT and educational inequality

Ladson-Billings (1998: 9) provides a purpose of CRT as:

> *an important intellectual and social tool for deconstruction, reconstruction, and construction: deconstruction of oppressive structures and discourses, reconstruction of human agency, and construction of equitable and socially just relations of power.*

In a paper she co-authored with Ladson-Billings and Tate IV (2006), both authors were of the view that, while race had been theorised as a lens to study social inequity, by1995, the theorisation of race had not, specifically, been intellectualised for educational inequality. Ladson-Billings (1998: 18) highlighted curriculum, instruction, assessment, funding of schools, and desegregation as themes of CRT that could be used as focal points to highlight educational inequity of learners in schools. While the themes are useful for educational inequalities in the classroom, they are not useful themes to study educational inequalities as a collective across primary and secondary schools, and tertiary education.

I turned my attention to CRT in relation to professional education as all the women participants in my study would likely have worked or continue to work in professional education. As an example

of professional education, Solorzano and Yosso (2001: 3) defined CRT in teacher education as follows:

> *a framework that can be used to theorize and examine the ways in which race and racism impact on the structures, processes and discourses within a teacher education context. […It also] theorizes and examines that place where racism intersects with other forms of subordination such as sexism and classism.*

Solorzano and Yosso (2001: 2) proposed a five-themed framework that showed relations between CRT but, this time, concerning teacher education. Like Ladson-Billings, both authors firstly proposed the acknowledgement of the centrality of racism in the manner in which schools and school practices were structured, recognising that discrimination by gender and class in schools also intersected with racism in schools. Of significance to my study is their acknowledgement of the intersection of race with gender and class. Secondly, Solorzano and Yosso (2001: 2) necessitated challenging the assumptions regarding normative views of the "culture and intelligence, language and capability [of the students], through research, pedagogy, and praxis". Thirdly, they proposed a commitment to social justice for the students by empowering under-represented groups. Fourthly, they acknowledged the lived experiences of the students and the contribution these could make to their lectures, and lastly, they proposed an inter-disciplinary approach to teacher education. While the five-themed framework proposed by Solorzano and Yosso (2001: 2) focused my attention on the experiential contributions that students could make while they participated in (teacher) education, the themes were not appropriate for my study. My study does not focus on the students of (teacher) education, instead, on the professionals who are delivering (teacher) education in higher education. In other words, the focal point of my study is the lived experiences of the professionals, not their students.

Bernal and Villalpando (2002) provided an entry point to the voice of the experiences of professionals in higher education. First, the authors analysed the statistical data with regards to faculty of colour across higher education institutions in America, then across academic ranks, and then across academic departments. Their statistical findings indicated that the "disproportionate stratification along types of higher education institutions and academic ranks, faculty of color are also unevenly represented across different types of academic departments" (Bernal & Villalpando, 2002: 170). Next, their statistical analysis was followed by an analysis of a narrative by an academic who applied for promotion as an assistant professor at her higher education institution. Bernal and Villalpando (2002: 176) noted that the academic's narrative provided an alternative to the accepted Eurocentric epistemology in the higher education institution. By Eurocentric

epistemology, the authors meant the view that *all* people, independent of their lived experiences of difference, achieved what they deserve based on the efforts they put into it (meritocracy). The authors articulated that despite the academic's efforts and belief that she was qualified and capable for the position, the interview panel did not value the alternate epistemology that she brought to the higher education institution. The authors' view was that a Eurocentric epistemological approach to academic promotion tended to ignore, misread or discredit epistemologies of a faculty of colour (Bernal & Villalpando, 2002: 171).

In the context of Bernal and Villalpando's (2002: 176) study, a CRT epistemology exemplified a counterstory that brought to the attention the "double standards that are firmly embedded in the whiteness of the academy". Stated differently, white supremacy, that is, a political, economic, and cultural system that promoted white dominance and non-white subordination in institutions and social settings (Harris, 1995), normalised Eurocentric epistemologies by creating what the authors called, an 'apartheid of knowledge'. An 'apartheid of knowledge' belittled the epistemologies of people of colour and, in doing so, created double standards in higher education (Bernal & Villalpando, 2002: 176).

Bernal and Villalpando's (2002: 169) phraseology of 'epistemological racism', may have some synergy with my study to the 'holders' of legitimate knowledge of 'coloured' women. In the case of Bernal and Villalpando's (2002: 177) study, the 'apartheid of knowledge' was "sustained by the *de facto* racial segregation that exists in higher education". Within the South African context, might the 'holders' of 'legitimate knowledge' of 'coloured' women lie with the researchers who have represented 'coloured' women in their scholarly writing? Alternatively, might the 'holders' of legitimate knowledge of 'coloured' women lie with society who experience 'them'? Might the 'holders' of legitimate knowledge of 'coloured' women lie within institutions or organisations? Alternatively, might the 'holders' of legitimate knowledge of 'coloured' women lie with individuals? Scheurich and Young (1997) suggest that the 'holders' of 'legitimate knowledge', whether the knowledge is perceived as correct or incorrect, encompass researchers, institutions and organisations, societies and individuals because, in their view, epistemological racism is at play throughout. Scheurich and Young (1997) emphasise that, by epistemological racism, they do not imply that researchers are racist, nor does it imply institutional and societal conspiracies in favour of whites. Instead, epistemological racism, according to Scheurich and Young (1997: 8), implies that "our current range of research epistemologies – positivism to postmodernisms/poststructuralisms – arise out of the social history and culture of the dominant race". Relating the ideas of Scheurich and Young regarding epistemological racism, the question of educational inequality for the women in my study becomes a question of ways of knowing about

'coloured' women. My study, therefore, requires a critical reflection of the women's educational past up until, and including, their current positions in higher education, calling for a CRT that includes an awareness of epistemological racism through reflective exercises of identifying critical incidents on their educational journeys. In some ways, it is more a looking back exercise, than looking forward, in order to make sense of their lives.

Much has been written about experiences of racism and exclusion within post-apartheid South African education and higher education contexts. For example, some authors have delved into the silences posed by the challenges of race and racism of minority group teachers in schools (Davids & Waghid, 2015). Others have explored the challenges brought about by race and racism of under-graduate and post-graduate female students at university (Daniels & Damons, 2011; Geldenhuys & De Lange, 2007; Snyder, 2014). Other authors have voiced the challenges of particular female academics in higher education (Divala, 2014). There are, however, no studies in South Africa that have revealed the lived experiences of 'coloured' women as a particular category, and their experiences of race and racism across their primary, secondary and tertiary education on their pathway to careers in higher education. The theorisation of 'coloured' is, therefore, necessary and discussed in Chapter 3.

2.7 CHAPTER SUMMARY

This chapter reviewed relevant literature on race and race construction to motivate why this study was best shaped and informed by Critical Race Theory. The literature about race and race construction was insightful as it gave a deeper understanding of the 'stories' that preceded the narratives of 'coloured' in South Africa.

The point of departure was an understanding of how Europeans constructed race during colonisation. Specific reference was made to race as biology, race as sociohistorical processes and race as a particularised 'look'.

Next, I turned to race and race construction in South Africa, leading to apartheid, apartheid ideology and the (de)construction of race in post-apartheid. By considering the centrality of race in South Africa, I was able to motivate for a conceptual framework of Critical Race Theory.

The next chapter discusses 'coloured' as categorisation in the colonies, 'coloured' as an identity, and literature of 'coloured' women in South Africa.

CHAPTER 3:
'COLOURED' WOMEN, EDUCATION AND A PREDETERMINED IDENTITY

3.1 INTRODUCTION

'Coloured', as a marker of race during colonisation and apartheid, is contentious and remains contested in post-apartheid South Africa. In my view, the contestation in post-apartheid South Africa is partly due to varying conceptual understandings of race during colonisation and apartheid. More so, some of the colonial and apartheid meanings of race may have transferred into post-apartheid South Africa. As an illustration, lived experiences of race classifications, (un)intentionally continues from an (un)necessary gaze of affirmative action, which is expected to be implemented in all government institutions. Affirmative action, with the continuation of the apartheid's race classifications, has confused and continues to confuse South Africans who, at the same time, are expected, themselves, to embrace a non-racial constitution. While I agree with the need for redress and restoration to correct the harms of the past, I disagree that it should be implemented on the basis of race.

Inasmuch as I am opposed to constructions and terminologies of race, the reality is that all South Africans – whether during apartheid or its democracy – are affected by the onslaught of these classifications. While whites were misled into believing that they were (are) a superior race, 'coloureds', blacks and Indians were (are) forced into subjugated roles. As will be shown through the narratives of the seven research participants, the marker of 'coloured' had profound impacts on their lives, choices, self-image and self-worth. These lived experiences cannot be understood without cognisance of the term 'coloured', and how the label of 'coloured' continues to haunt them in post-apartheid South Africa.

Given the centrality of the concept and category of 'coloured' in this research, I have decided to expound on it in this chapter. I will pay particular attention to the categorisation and interpretation of 'coloured' in different geographical, political and social contexts to highlight the categorisation of 'coloured' in the colonies. Thereafter, I will pay specific attention to the categorisation of 'coloured' in South Africa. I will show how the Dutch and then the British colonisers lay a foundation of poor socioeconomic conditions for people of mixed ancestry, which culminated into the rise of a 'coloured' identity. I will also show how circumstances of socioeconomic deprivation led to resistance by intellectuals.

Notwithstanding, apartheid humiliated people further by legislating a classification of 'coloured', crystallising a 'coloured' identity. In post-apartheid, the tatters of a marginalised 'coloured' identity are sewn together with threads of stereotypes, derogatory and misleading connotations and research that 'coloured' women (and men) have to wear and defend (or reject) for acceptance in a new democracy.

3.2 'COLOURED' AS A CATEGORISATION IN THE COLONIES

3.2.1 Free 'People of Colour'

According to Sumpter (2008: 19), the phrase, 'people of colour' was coined during the slave trade, particularly in New Orleans in Southern Louisiana during the colonial periods of the French (1682–1763) and the Spanish (1763–1800). A blend of traditions and customs between the French, the Spanish and the Africans created a racial fluidity that was not practised as openly compared to the rest of Louisiana and the United States. For example, an institution of *plaçage*, a legally sanctioned mistress relationship, was practised between some European male slave owners and African slave women who set up households together. Under French and later Spanish colonial policy, those who were conceived from both European and African ancestry became known as *gens de couleur libres*, which translated into 'free people of colour' (Sumpter, 2008: 19). A tripartite fluid racial structure came into being by the creation of a middle-tiered 'free people of colour'.

Legally, free 'people of colour' were permitted similar privileges as Europeans, such as slave ownership and access to education, which was unusual compared to other slave states. During the transition from colonial rule to statehood (1803–1850), an increase in Anglo-Americans to New Orleans, in particular, denounced the privileges of free 'people of colour', and returned the fluid tripartite racial categorisation of Louisiana to a rigid binary system of black and white racial groups (Sumpter, 2008: 19). Sumpter's writing doesn't make it clear whether the labels of black and white were created during the time of the transition or whether these labels followed in later years. Needless to say, her binary racial categorisation suggests that free 'people of colour' in New Orleans were either integrated into white or merged into black racial categories. Sumpter (2008: 20) argues that the new status of free 'people of colour' depended on their white or black racial categorisation, which had both social and legal consequences. Gradually, social practices of colonial traditions were replaced by Anglo-American practices. Her study of 1850 census data of municipalities and their geographical locations in New Orleans indicated that free 'people of colour' resided in specific wards of New Orleans, namely, the 'non-American' wards with less hostile French and Creole (people of colour born in the colony) influences (Sumpter, 2008: 20). The diversity of creolisation made binary racial categorisation problematic for the American

government and their municipalities; therefore, free 'people of colour' in Louisiana became increasingly monitored by the legislation of their social practices and behaviours, and controlled by spatial segregation (*ibid.*: 33).

3.2.2 Free 'coloured'

From the mid-17th century into the latter part of the 20th century, Caribbean islands, such as Jamaica and Barbados (amongst others such as St. Kitts, Nevis and Antigua), were under British control (Heer, 2011: 857). When the English captured Jamaica in 1665, for example, Jamaica was under the ruling of Spain. An altercation of colonial power exacerbated between the English and the Spanish until Jamaica became a British colony from 1707 to 1962. According to Sio (1976: 8), a complex rank order of colour that was based on skin pigmentation and status was established in Jamaica from 1733. This rank order included the following categorisations:

- Negro: child of Negro and Negro
- Mulatto: child of white and Negro
- Sambo: child of mulatto and Negro
- Quadroon: child of white and mulatto
- Mustee: child of white and quadroon
- Mustifino: child of white and mustee
- Quintroon: child of white and mustifino
- Octoroon: child of white and quintroon

Sio (1976: 8) notes that, under the legislation, a 'free 'coloured'' group in Jamaica comprised of the mulatto, provided that any person in question was darker than mustifino. Adding to the complexity of categorisation in Jamaica, the 'free 'coloured' group' was further divided into "free browns (mustee, quadroon, mulatto) and free blacks (sambo, Negro)" with detrimental social, economic and political consequences (Sio, 1976: 8). While some 'free coloured persons' had relative privileges, these privileges were based on their land ownership at the time, whether their fathers had considerable estates, whether they were sufficiently educated to sustain their livelihoods, and whether they practised Christian principles (Sio, 1976: 8-9). Each of these criteria depended on relations with their white counterparts.

Unlike Jamaica, a 'free coloured group' in Barbados was not differentiated further by rank order (Sio, 1976: 13). The vast majority of 'free coloured persons' during 1789 and 1831 were, in contrast to some Jamaicans, "propertyless and generally poor" (Sio, 1976: 13). By the 1820s, the population of 'free people of colour' in Jamaica exceeded the European population in Jamaica and, in Barbados, the numbers of 'free people of colour' was on the rise relative to Europeans (Sio,

1976:7). Despite the increased numbers in both Jamaica and Barbados, the 'free coloured' persons' had limited wealth, property ownership, occupation and education restricted legally, politically, economically and socially by a ruling British supremacy (Sio, 1976: 19). 'Coloured', as a categorisation of a particular group of people, in islands such as Jamaica and Barbados, were constructed as a means to control and manage a 'free coloured person's' access to wealth, property ownership, occupation and education. The experience for Europeans was different. Wealth, property ownership, occupation and education was a right granted to Europeans, not a privilege. Stated differently, 'coloured' became a category of perceived privileges, not considered for equal rights.

3.2.3 Returning as immigrants to the metropole

The 20th century saw an influx of colonised people to the motherland of their colonisers. Britain, for example, saw an influx of colonised people from the Caribbean, particularly after the Second World War (1939–1945). In 1953 opposition to 'coloured' immigration to the British metropole began to rise. For example, racist signage such as "No 'coloureds' allowed" excluded a perceived group of immigrant people to fundamental human rights across most areas in Britain (James, 1970: 422). Holmes (1975: 116) was of the view that British people perceived the arrival of the ''coloured' immigrants' as a "social-cultural" threat rather than a political and economic challenge.

In 1962 the Commonwealth Immigration Act prohibited the automatic entry of Commonwealth citizens into Britain, prioritising entry to skilled and qualified citizens from the colonies, subsequently, minimising entry to unskilled 'coloured' workers (Holmes, 1975: 118). For Holmes (1975: 118), the British government intended to reduce additional resources that would be needed in growing areas of resident immigrants, also to reduce the potential of protests between immigrants and locals, and to increase a skilled and qualified labour force in Britain. Despite the suggested intentions by the British government, Holmes (1975: 120) believes that racial discrimination of 'coloureds' continued, largely with regards to issues of housing, access to employment and provision of financial services. If Holmes' view of racial discrimination is true, then the antagonism to the arrival of an immigrant population provides some evidence of preconceived ideas of 'coloured' immigrants. The preconceived ideas could be interpreted as the marking (and scarring) of the bodies of (un)skilled 'coloured' men and women before their arrival to the metropole.

In response to protests against racism towards 'coloured' immigrants, the British government introduced the Race Relations Act of 1968, which made it illegal to deny 'coloured' people employment, housing and public services based on race, colour and ethnic background (Holmes, 1975). Notwithstanding, discrimination against 'coloured' immigrants was not covered by law in all

areas nor was legislation enforced in public spaces (Holmes, 1975: 120). The 'coloured' population in Britain became under-rated citizens subordinated with inferior access to human rights, gently, yet consistently, encouraged by the British government. In Holmes'(1975: 120-121) words:

> *[G]overnment action, and its inaction over discrimination were major influences affecting race relations in Britain, making a crucial contribution to the maintenance of white privilege and developing a feeling of inferiority and powerlessness among many members of the 'coloured' community.*

At the time of Holmes' (1975: 123) writing, he noted that in the Political and Economic Planning report of 1967, areas in Britain that were not covered by the Race Relations Act revealed an increase in racism towards better qualified 'coloured' immigrants. The reporting of increased racism towards those better qualified, called for a hiatus to consider the correlation between economic threats of the white working class in Britain and their insecurities around qualified or better qualified 'coloured' immigrants.

In the 21st century, the derogatory category of 'coloured' is scarcely used in Britain. 'People of colour' appears to be a more acceptable term for "[w]hite ethnic grouping … [and]… immigrants from Latin America, Asia, India and Pakistan in addition to people who can claim African ancestry" (Christian, 2005: 327).

3.2.4 Tribal ancestry

The term, 'coloured', in Southern Africa has a range of meanings. One of the meanings of 'coloured' in Southern Africa is related to the original inhabitants of the land. While other tribes were living in Southern Africa, the largest of the tribes and the original inhabitants of Southern Africa, were the Khoe herders and San hunter-gatherers (Besten, 2009; Richards, 2017; Van Wyk, 2016). However, the Khoe and San tribes were denied their distinctiveness as original inhabitants of Southern Africa (Van Wyk, 2016: 37-38).

As early as the 1600s, the Dutch colonialists renamed the Khoe as Hottentot and the San as Bushmen (Van Wyk, 2016: 34). A collective for the Khoe and the San tribes is Khoisan. Khoisan unions with Europeans and slaves, and the assimilation of European and slave languages, led to an alteration of Khoisan lifestyles. According to Richards (2017: 219), instead of embracing the Khoisan-Euro-slave heterogeneous persons, the colonialists preferred to "marginalise, reject and bastardise" them and they were labelled as part of the racial categorisation of 'coloured' in South Africa and Namibia. Buchanan and Hurwitz (1950: 398) referred to the "Bushman, Hottentot,

Griqua, Koranna and Namaqua" tribes as the "aboriginal 'coloured' races", which formed part of the larger Khoisan-Euro-slave "mixed and other coloured" group in South Africa.

The Rehoboth Basters is a small community who reside in a pocket of Namibia. The word, *basters*, is an Afrikaans word which translates to hybrids or half-castes in English. The Rehoboth Basters are descendants of Europeans and Khoisan (Biraimah, 2016: 47); their neighbouring communities consider them as Namibia's 'coloured' population. The Rehoboth Basters initially lived in the Cape during colonisation. However, they felt unsupported by their European and Khoisan ancestral peers (Kjæret & Stokke, 2003: 584), and subsequently migrated to German South-West Africa (later called Namibia after it gained independence from South Africa).

Furthermore, exploitation by a German eugenist, Eugen Fisher of Freiburg University who conducted studies of the Rehoboth Basters in 1913, concluded that the Rehoboth Basters, as half-castes, were found to be "mentally, physically and morally inferior to their white progenitors" (Dubow, 2013: 228). This particular outcome of Fisher's study served as evidence for opposing miscegenation in South Africa, and motivation for segregation in South Africa (*ibid.*). Under the guidance of Europeans, 'coloured' became an inferior categorisation relative to Europeans, because of their sexual relations with Khoi and San people.

3.2.5 African mothers and European fathers

Under British rule, 'coloured', at the start of the 20th century, also meant the ancestral inheritance from the union between an African woman and a European man in specific parts of Southern Africa. For example, the 1900 Census Act of Southern Rhodesia, now called Zimbabwe, categorised non-Europeans into three main categories: native, Asian and 'coloured' (Muzondidya, 2009: 157). Native meant any person or descendant of a person who was born of a person indigenous to Africa. According to Muzondidya (2009: 157), Asian persons consisted of Chinese, Indians and Malays or their descendants. At the same time, the category of 'coloured' referred to "any person other than Asiatic or native whom ha[d] the blood of an Asiatic or native". Muzondidya (2009: 158) added that churches and missionaries had a role to play in the creation of a 'coloured' category in Southern Africa. For example, Catholic churches and missionaries believed that 'coloured' children were offspring of European lineage and, subsequently, the colonial government was responsible for the well-being and protection of their offspring.

In Zambia, previously called Northern Rhodesia, people who were categorised as 'coloured' were referred to as Eurafricans. Under British rule in this colony, Euroafricans were descendants of European fathers and native African mothers. At the same time, children of these unions were referred to as 'mixed-race' or bastard children. The absence of European fathers meant that the

children were marginalised as illegitimate with detrimental effects of rights of inheritance in their father's home country; the mothers and children were left with challenges of biological inheritance and stereotypes of racial impurity (Milner-Thornton, 2009: 186). Milner-Thornton suggests that the categorisation of 'coloured' in Zambia, was embraced as an alternative to insults of 'half-caste' and 'darkie'(2009: 201).

3.3 (DE-)CONSTRUCTING 'COLOURED' AS AN IDENTITY IN SOUTH AFRICA

3.3.1 Mixed ancestry and socioeconomic deprivation

The term 'coloured' in South Africa is embedded in the socioeconomic and political rhetoric of colonial rule in the Cape Colony. The term was constructed to identify people, who originated from a mixed ancestry of European and African (and later Asian) (Adhikari, 2008: 78). As was the case in other parts of Southern Africa, Europeans associated people of mixed ancestry with inferiority, illegitimacy and shame in the Cape Colony (Erasmus, 2017: 85). Buchanan and Hurwitz (1950: 397) noted that, within the first twenty years of European settlement, 75% of children born to slave mothers in the Cape had European fathers. Since there was an increasing number of children born with mixed ancestry, slave mothers and their children conceived from European fathers may have resulted in derogatory identities being formed, compared to the identities of the Europeans and the slaves in the Cape.

By the time the British annexed the Cape in 1806, unions between European fathers and African mothers were common but appeared to have been problematic to the British rulers. Sachs (1969: 13), for example, brings to the attention the Vagrancy Laws of 1809 and 1819 that disallowed "non-slave coloured persons from moving from one place to another without a written permit from a local official". The vagrancy laws indicate that the British sought legal means to monitor and control the movement of persons of mixed ancestry (whether they were slaves or not). Soon after, in 1828, the British repealed the vagrancy laws and, in 1834, slavery was abolished in the Cape (as a colony of the British Empire).

It could be assumed that the consequences of the abolition of the laws of subordination and oppression would allow for an increased participation of people of mixed ancestry ('coloured' people) in European society. On the contrary, Sachs (1969: 13) notes that the British made no provision for land acquisition, education and political rights of 'coloured' people because the British had no intention of promoting socioeconomic equality. In my view, there was no plan of improving the well-being of people with mixed ancestry following emancipation. Subsequently, 'free' people were left with minimal human rights. The paradox of the emancipation of slaves (and the repealing of the vagrancy laws) in the Cape was that it "failed utterly as it made no provision for

the transition period from slavery to economic independence" (Desmore, 1937: 351). Unlike other 'coloured' categorisations in Southern Africa, a 'coloured' categorisation of mixed ancestry in South Africa was beginning to evolve into a 'coloured' identity that was associated, largely, with socioeconomic deprivation and dehumanised conditions of homelessness, silenced by no rights to land and no rights to prosperous jobs for a large majority.

3.3.2 Education as a response to socioeconomic deprivation

It is worth noting that the label of 'coloured' was already a common term in the Cape at the start of the 20th century, imported by Europeans through their experience of colonisation in other parts of the world, like America. Therefore, authorities in the Cape were familiar with the label. Concurrently, some intellectuals in the Cape Colony identified with a categorisation of 'coloured', as an identity of a social group. While these intellectuals embraced a 'coloured' identity, they did not approve of the socioeconomic deprivation of 'coloured' people and their underclass status. Adhikari (2006, 2008) reveals that these intellectuals viewed a 'coloured' identity as one that was lagging relative to their perception of a more advanced European culture. Adhikari (2006: 475) reasons that a particular racial theory was that one's external environment contributed to the development of individuals and their social groups. By improving social environments, a social group could be improved. Following, cooperation amongst social groups would be dependent on the personal merits of individuals in these social groups.

From the perspective of Adhikari (2006: 475), one of the ways to improve the socioeconomic environment was by assimilationism. For Adhikari, assimilationism was the purposeful intention by a 'coloured' elite to improve their worthiness and to be recognised by their dominant European counterparts. It is useful to note that assimilationism was not an intention to blend into European culture *per se*. Instead, assimilationism meant an acceptance into European middle-class culture, particularly in Cape Town;[6] and education was viewed as a vehicle to obtain a middle-class status.

Education became increasingly important because, during the latter part of the 19th century, mission and public schooling were the main routes to education in the Cape (Adhikari,1994: 108). Church schools were established and catered for the more impoverished communities, while public education was provided by the state, predominantly for white and wealthier families. While English-speaking Christian missionaries were in favour of equal education (Christie & Collins, 1982: 60), their stance, however, can also be considered as one of assimilationism because their

[6] Cape Town was a prosperous hub for Europeans serving as a halfway house between the east and the west.

staff wanted to raise the quality of the education of non-whites to that of Europeans. Access to public education played a significant role in segregating whites and non-whites in the Cape Colony as in 1905, for example, public education became compulsory for white children (only), until they reached Standard 4 (Grade 6) or until 14 years of age (Adhikari, 1994: 108). By 1907, there were no state schools for the secondary education of 'coloured' learners, if secondary education was what 'coloured' learners and their parents wished for them to pursue (Adhikari, 1994: 117).

One example of the increasing importance of education in the Cape was the formation of the Teachers' League of South Africa (TLSA), formed in 1913 as a voice, specifically, of 'coloured' teachers (Adhikari, 2006: 475). Formed by the African Peoples Organisation (APO), the TLSA represented an emerging 'coloured' bourgeoisie (Adhikari, 1994: 105). The TLSA was able to gain support on the concept of 'coloured' from the teachers because of the entrenchment of racialised identities in the Cape (Adhikari, 1994: 102), and also because 'coloured' teachers were officially recognised by the Education Department (Chisholm, 1991). The TLSA sought negotiations with authorities as ways to raise the profile of 'coloured' teachers. Abe Desmore (1937: 350) stated proudly that "[f]orty years ago 'coloured' teachers were rare. To-day [in the 1930s] in the Cape Province there are close on 2 000 ['coloured'] teachers who number among them a fair sprinkling of graduates with advanced degrees". Desmore's statement indicates that the TLSA was making progress with assimilation into a middle-class culture because of an increasing number of 'coloured' teachers and, working with the authorities, had reaped some benefits of producing graduates in the education system.

In contrast to an increasing number of teachers in the Cape and a growing 'coloured' bourgeoisie, a large proportion of 'coloured' youth remained poorly educated and remained as an underclass. State education was not compulsory for 'coloured' youth. And, by 1927, compared to a figure of 13 128 white children who completed the first year of secondary education, only 785 'coloured' children had equivalent certification (Giliomee, 1995: 7). The low numbers indicate that limitations continued to be placed on secondary schooling and, subsequently, limitations on the schooling and academic development of 'coloured' youth. In 1921, the Juvenile Affairs Act and, in 1922, the Apprenticeship Act served as springboards for white youth (males) to engage in skilled labour (Adhikari, 1986: 67). Since the Juvenile Affairs Act was determined by regulations that insisted on compulsory education, 'coloured' youth (males) could not be allocated to skilled trades (Adhikari, 1986: 68). While the Apprenticeship Act had a minimum criterion of a Standard 6 school certificate (Adhikari, 1986: 68), 'coloured' youth (males) may not have had the monetary resources to fund the completion of the Standard 6 school certificate (Desmore, 1937: 353). For example, Desmore

(1937: 354) writes that in 1936, close to 75% of the total school population in the Cape, stopped their schooling before Standard 3 which he accounted to their poor economic circumstances.

A lack of opportunities for 'coloured' youth were exacerbated when unskilled work-seeking Afrikaners from rural areas made their way to urban areas. While the Afrikaners were unskilled, they had the advantage of being white. The materialisation of skilled labour for 'coloured' youth was closer to absent. Adhikari (1986: 68) provides evidence:

> *The coloured's share of employment in private industry in the Western Cape declined from 55 per cent to 48 per cent and in governmental and local governmental industrial undertakings from 44 per cent to 30 per cent between 1924 and 1932, despite the high growth rate of the 'coloured' population.*

Consequently, for a large number of 'coloured' youth, opportunities for work and education were not an option for assimilation into the middle-class culture. While there was an increase in the 'coloured' bourgeoisie, a large underclass remained amongst a 'coloured' community. For example, Buchanan and Hurwitz (1950: 407) write that by 1941, other than a small number of skilled 'coloured' professionals, there was an underworld of "skolly boys" and a large labouring class that consisted of "farm workers, unskilled labo[u]rers, domestic servants, and industrial workers". Whether the view of Buchanan and Hurwitz is true, and whether it is derogatory, little has been written about the hopes of the under- and labouring classes, and whether these hopes included the development of *their* education to improve *their* lives, which for the participants in this study, may have been a reality.

3.3.3 Education to liberate the shackles of the ('coloured') mind

Inasmuch as there were a small group of intellectuals and teachers who embraced education as a means to improve a denigrated socioeconomic underclass status of 'coloured' people in the Cape, strategies of the TLSA for socioeconomic freedom was considered too passive by other intellectuals and political activists. For example, from the perspective of Neville Alexander (1993: 33), a Marxist socialist in South Africa, the mid-1940s saw an increase in interest of anti-colonial, communist and socialist struggles and Marxist ideas by the Anti-Coloured Affairs Department (Anti-CAD) Movement and a faction of the ANC Youth League. These intellectual and political activists opposed a European ruling class. Consequently, ideas of non-European unity and democracy were on the rise, predominantly in Cape Town in the Cape Colony. Subsequently, in 1943, the Non-European Unity Movement (NEUM) was established amongst intellectual activists (Adhikari, 2006: 471).

According to Chisholm (1991: 5), the formation of the NEUM was significant because it fostered the first conceptualisation of "the role of intellectuals and teachers as intellectuals" in South Africa. The conceptualisation meant that a joint intelligentsia could influence the content of education that would be taught to youth at schools during apartheid. For the NEUM, the key to socioeconomic liberation was to remove their perception of the mental shackles of slavery (despite the emancipation of slavery one hundred years before). The leaders of the NEUM understood the shackled minds as continued sources of oppression. Furthermore, the NEUM viewed education and politics as inseparable.

Teaching, a profession of high status at the time, was also crucial to unshackling the enslaved mindset of socioeconomic deprivation by the youth (Chisholm, 1991: 7-8). Therefore, the roles of teachers who aligned themselves with a philosophy of the NEUM (like the TLSA in 1945) would play a role in the schooling of youth and generations to follow. These teachers and the generation to follow would be as politicised in schools as the intellectuals who were propagating anti-colonial, socialist and Marxist ideas. More importantly, these teachers did not ascribe to a 'coloured' identity.

To some extent, the teachers schooled by the intelligentsia of the NEUM determined the content of education taught at schools for 'coloured' learners. Chisholm (1991: 21) states that the NEUM's influence in schools was by giving "rigorous, strenuous attention [to] the education of politics, and the politics of education". The NEUM intended to defeat apartheid as a project out of socioeconomic deprivation. A few NEUM schools delivered on this project by employing teachers who were committed to the struggle against apartheid through a Marxist lens, and who embraced political activities outside of the school grounds. For example, teachers, trade unionists, activists and learners participated collectively in debates and readings alongside each other, which, in turn, would have influenced and politicised the identities of their learners. However, the schools of these teachers were few and far between, mostly at Harold Cressy, Trafalgar, Livingstone and South Peninsula high schools in Cape Town (Chisholm, 1991: 12). Since the NEUM mostly represented a middle-class contingent in Cape Town, socially and economically deprived 'coloured' people outside of Cape Town, such as Paarl and Somerset West, and rural areas were unfamiliar with their Marxist socialist thoughts. Therefore, for the vast majority of remaining 'coloured' teachers who were not reached by NEUM, socioeconomic deprivation remained an unsolvable oppressive reality.

3.3.4 Concretising separation and segregation

In the 1950s, the new apartheid government led South Africans to believe that there were differences in the biological makeup of people such as skin tones, facial features and hair textures which, unbeknownst to many, amounted to an acknowledgement of different races. Not only did the

apartheid government want to show difference amongst people, but also a particularised subordination. The apartheid regime imposed racial classifications by legislation, one of which was a 'coloured' racial group. The apartheid regime imposed racial classifications by legislation, one of which was a 'coloured' racial group. According to Adhikari (2006: 477), race stratification, segregation and separation misled people, classified as 'coloured', that they were subservient to whites and better than blacks.

On the one hand, the classification of 'coloured' had its own negative connotations and, subsequently, some people who would have been classified as 'coloured' in 1951, took the opportunity to register themselves as white (Erasmus, 2017: 88; Giliomee, 1995: 9). On the other hand, persuasion to register race classifications by the mid-1950s occurred by rewarding 'coloured' individuals with social benefits such as teacher training, nursing and government pensions (Breckenridge, 2014: 230). After 1955, Breckenridge (2014: 231) notes that racial classifications were humiliatingly decided by officials based on the officials' interpretation of the "legal criteria of racial acceptance and appearance" (relative to whites) for approximately one million 'coloured' people. A decade later, racial classifications were embedded in a bureaucratic system that was passed down from one generation to the next (using identity documents issued at 16 years of age). For this reason, children of the parents who were classified as 'coloured' from 1951, inherited a racial classification of 'coloured' when they turned 16 years old from 1967. In turn, the experience of classification of 'coloured' was equated to a humiliated and marginalised identity for many.

3.3.5 Racially segregated schooling system

In order to understand the racially segregated schooling system in South Africa under apartheid, it is worth going back ten years before the National Party came to power in 1948. In Chapter 2, I considered Dubow's (1986, 2013, 2014) argument that from the early 1930s, race purity became popular amongst white Afrikaners. Following from a mindset of race purity, in 1939, the Federation of Afrikaans Cultural Organizations met to discuss refuting the anglicization of education (Bunting, 1969). According to Bunting (1969), the idea of the Federation of Afrikaans Cultural Organizations was to instil a Christian National Education, that 'educated' (controlled) the minds of the youth of their expected positionality concerning their 'cultural' race. Directing educational positionality in relation to a 'cultural' race meant that segregation was made possible in the schooling system of South Africa. In 1948, the institute of Christian National Education circulated recommendations to Afrikaans-speaking affiliates who had interests in education. Bunting (1969) describes the pamphlet as "fundamentalist and totalitarian", highlighting the following about 'coloured' education (Article 14):

> *The education of Coloureds should be seen as a subordinate part of the Afrikaner's task of Christianizing the non-White races of our fatherland. It is the Afrikaner's sacred duty to see that the Coloureds are brought up Christian-Nationalist.*[7] *Only when he is Christianized can the Coloured be truly happy; and he will then be proof against foreign ideologies which give him an illusion of happiness but leave him in the long run unsatisfied and unhappy.*
>
> *He must also be a nationalist.*
>
> *The welfare and happiness of the Coloured lies in his understanding that he belongs to a separate racial group (hence apartheid is necessary in education), and in his being proud of it.*

The education, therefore, of the 'coloured' youth of South Africa was conceptualized, from the perspective of Bunting (1969), to indoctrinate their minds with the values of Afrikaner Christian-nationalism dissuading 'coloured' youth from alternate ideologies that posed a threat to Afrikanerdom. I say this because the conceptualisation reveals the apartheid regime's antithesis to the values of an 'other', for example, whether this is British or another religion's education, educating women, anti-apartheid ideologies or socialism. Hexham (1975: 113) offers an alternative to Bunting's view of Christian National Education as a national ideological commitment of the Afrikaners, where the Reformed Church played a leading role in the "training of teachers and other leaders of the Afrikaner Community" in Christian-National theories. In other words, instead of Christian National Education viewed as a product of Afrikaner nationalism, Hexham (1975: 114) asserts that Christian National Education seeded Afrikaner nationalism. He continues that Dutch Calvinists instilled in parents that it was a Christian duty of parents to educate their offspring with the Calvinist faith; any liberal attitude towards education was frowned upon and viewed as reactionary to Calvinism. Dubow (2013: 218) adds that it was Kuyper, a Dutch theologian, who derived the notion of "God as the Great Divider", and his theologian followers in South African followed suit. Christian schools became an essential part of Calvinist faith in the Reformed Church in the Netherlands and, in South Africa, many Dutch Reformed members joined the National Party (Hexham, 1975: 115).

With regards to the home language of instruction in schools, Bunting (1969) adds that one by one, the Nationalists gained control of provincial councils so that, as a majority, they had the power to

---

[7] Christian meant in relation to the creeds of the three Afrikaner churches and nationalist meant the love of one's own language, history and culture (Bunting, 1969).

decide on the mother-tongue education of a young person. The Nationalists gave decision-making authority to inspectors and school principals, thereby removing the power from parents. Moreover, once education was directed by the probing of provincial councils, authority was withdrawn, and education became controlled nationally with the legislation of the National Education Policy Act No. 39 of 1967 (Grant, n.d.); provincial directors of education were tasked to enact and advise on the education policy for whites only. National educational policies gave the Minister of Education, Arts and Science the authority to decide on school education (Bunting, 1969). It is precisely because the government attempted to enforce Afrikaans in all schools that, in 1976, student protests and revolts erupted nationwide (Tutu, Boraine, Burton, Finca, Khampepe, Lyster, Malan, Mgojo, Mkhize, Ntsebeza, Orr, Potgieter, Randera, Sooka & Wildschut, 1998).

3.3.6 Students and learners as political activists during apartheid

While there were teachers who were politically charged, there were also university and college students who felt the need to resist apartheid. In 1968, the emergence of student activism led to the formation of the South African Students Association (SASO) across the country (Ndebele, 2002: 139). Spearheaded by Steve Biko, the association promoted an alternative to racially separated political ideologies. Subsequently, the BC movement was born as a collective of all oppressed and marginalised people in South Africa (Alexander, 1993: 41).

At the same time, in support of the opposition to the killings of hundreds of youth in Soweto and Langa in 1976, schools across the country united and became politically charged sites. Marches and school boycotts became the order of the day, nationwide. Inevitably, the youth, schooled in the late 1970s, like some of the participants of this study, would have been politically influenced by the ideology of the BC movement insofar as opposing a white ruling class who were unwilling to function under Biko-black leadership. Furthermore, some learners (and teachers) had been affected by forced removals in areas such as District Six, Claremont and Harfield in Cape Town, and displaced to townships in the Cape Flats such as Retreat, Bonteheuwel, Mitchells Plain and Grassy Park. Forced removals also occurred outside of Cape Town in urban areas such as Paarl and Somerset West.

By the 1980s, the NEUM had diminished in size. Some activists considered their strategies as less hands-on compared to the realities of protests on the streets of South Africa (Chisholm, 1991: 20). In 1985, youth pragmatists replaced the NEUM with the New Unity Movement (NUM). In protest of the apartheid regime, NUM schools like Livingstone and Harold Cressy high schools in the Cape rebelled and continued to educate their youth in 1985, despite school closures by the national government in the same year. Livingstone continued with the teaching of the school curriculum, and

Harold Cressy continued their schooling based on further political conscientisation of their learners. Other schools, like Groenvlei and Sinton high, remained shut for teaching. For high schools like Groenvlei and Sinton, school education came to a halt as their learners chose to join political rallies in neighbouring areas.

The intelligentsia of the NEUM also succeeded in dissuading their followers from attending 'bush' universities, [8] like UWC. In my view, this was an unfair decision as, in 1982, UWC defied the National Party's separatist university admission policy and embraced a nonracial policy for incoming students and lecturers (Anderson, 2003: 36). The defiance meant that, for the first time in the history of apartheid, all students and lecturers could be part of a non-racialised university in South Africa. Students schooled by the NEUM intelligentsia, like some of the participants in this study, found their tertiary education at institutions such as the University of Cape Town (UCT) and the South African Committee on Higher Education (SACHED). In 1981, Neville Alexander became a regional director of SACHED (Dollie, 2011: 123). Via SACHED, Alexander established the Khanya College, which would become a useful academic organisation for non-white students (Dollie, Mahate, Marsh, Motala, Pease, Solomon & Soudien, 2013: 616). Khanya College served as a halfway house between secondary school and tertiary education, particularly for those students who were politically savvy and wanted to increase their curriculum knowledge before admission to a university.

In contrast to the NEUM, the United Democratic Front (UDF) came into being in 1983 as a united, non-racial movement that embraced a rural working-class – learners who were raised in working-class environments had the opportunity to embrace the UDF (Du Preez, 2003). The non-racialised ethos of the BC movement was a stepping stone to the UDF's strategy of political massification and mobilisation. Since the BC ethos portrayed blackness as a condition of suffering, instead of black as a racial classification, the UDF was able to rally tens of thousands of people together across the country. Therefore, teachers outside of the NEUM also became politicised, not only in Cape Town but throughout the country. In turn, the teachers' influence in schools politicised their learners. The socioeconomic circumstances, and the mass movement of the UDF, triggered the politicisation of students and earners, and their desire to be further educated.

---

[8] 'Bush' universities were set up by the apartheid government to segregate higher education. Each 'bush' university could only enroll students of a particularised race of black, 'coloured' or Indian. UWC could only enroll 'coloured' students.

Moreover, with education, came the possibility, the knowledge and the capacity to resist oppression. As will become apparent in my study, several participants would describe themselves as political activists, either during their time as school learners, or university students – that is, that they actively opposed and protested against the apartheid state. It is, therefore, necessary to provide a sense of the prevailing professional educators and contexts within which the participants in this study found themselves as students as they entered higher education.

3.4 PROFESSIONAL EDUCATORS IN HIGHER EDUCATION DURING APARTHEID

3.4.1 Women in higher education during apartheid

Research on the experiences of women in higher education abounds abroad (Bagilhole & White, 2013; Leathwood & Read, 2009; Mackinley, 2016) and to a lesser extent in South Africa (Shackleton *et al.*, 2006). During apartheid, one avenue to become a professional educator in higher education was either through employment at a university or via a technikon. Apartheid legislation and its patriarchal nature crystallised disparity in education as inequality and discrimination were further embedded for women in higher education. For example, if women attempted to advance their careers as permanent professional educators in higher education at universities, their chances of employment would have been slim as professional roles would have been allocated, primarily, to males as will become evident from the graphs below.

Figures 3.1–3.3 shows the gender breakdown of permanent professional educators at universities in the Western Cape from 1986 to 1994, followed by 2014 as an indicator of increased accessibility to these roles twenty years into democracy. Data were obtained from the Department of Higher Education and Training (DHET)[9]. Professional educators in higher education refer to those who are permanently employed as instruction/research professionals, executive/administrative/managerial professionals and specialist/support professionals.

Figure 3.1 below shows the gender of permanently employed professional educators at the University of Cape Town (UCT). The number of males and females were relatively constant from 1986 to 1994 at UCT. Twenty years after the first democratic elections in South Africa, the number

[9] http://www.dhet.gov.za/SitePages/UniversityEducation.aspx. Data provided on this website was from 1986. The gap between the years 1994 and 2014 was deliberate on my part to bring attention to the changes after 20 years into a democracy (or lack of changes).

of female professional educators had trebled and equivalent to the number of male professional educators.

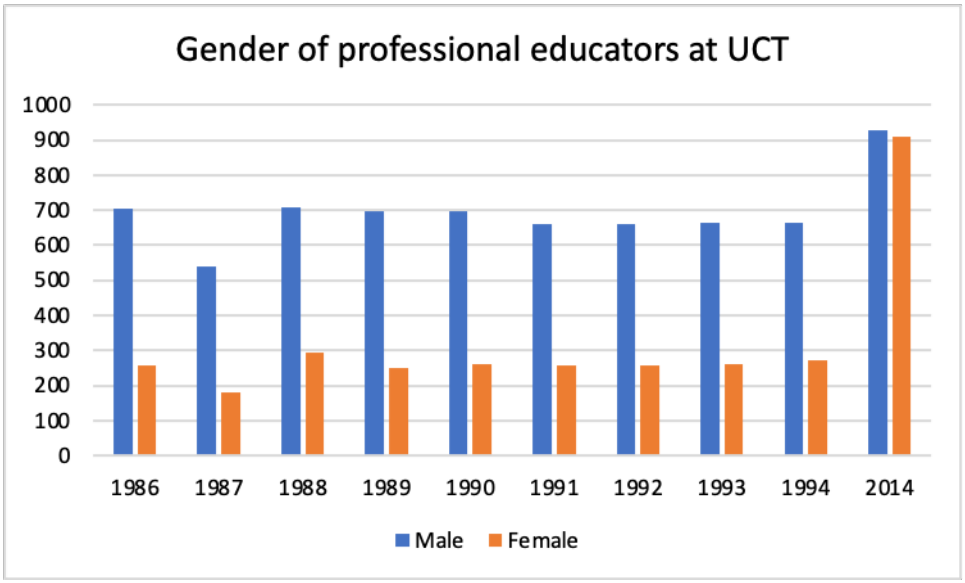


Figure 3.1: Gender of professional educators at the University of Cape Town

Figure 3.2 below shows the gender of permanently employed professional educators at the University of the Western Cape (UWC). While there remained almost double the number of men employed as professional educators, compared to women, at UWC from 1986 to 1994, there was an increase in the number of appointments for both genders during the same time. In 2014, the gender disparity was almost negligible at UWC. While the number of females has increased, the number of men have remained relatively the same.

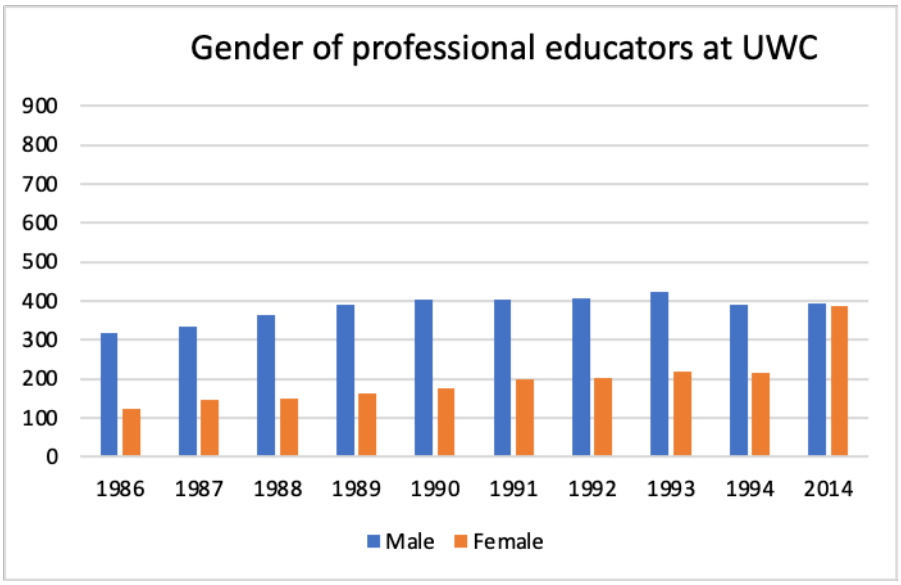


Figure 3.2: Gender of professional educators at the University of the Western Cape

Figure 3.3 below shows the gender of permanently employed professional educators at Stellenbosch University. The graph highlights a significant number of permanently employed males at SU from 1986 to 1994, though there was also a gradual increase in the number of females employed during the same period. Twenty years into a democracy, the number of females appointed as professional educators has almost trebled but continues to lag behind male professionals. While the number of males have remained steady, the number of permanently appointed professional educators has almost doubled. The stability of the number of males may also indicate that the females did not replace males; instead, the females were an addition to the professional educators as the student intake increased at SU.

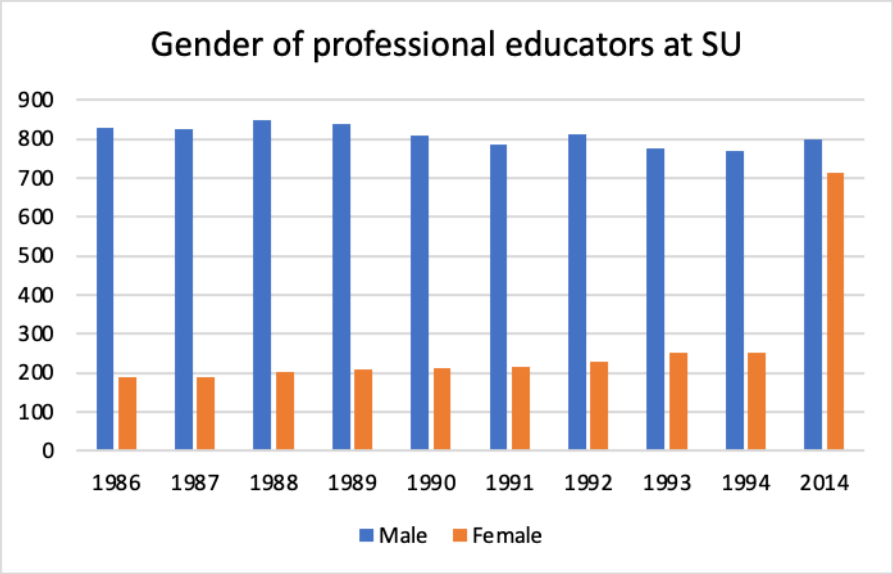


Figure 3.3: Gender of professional educators at Stellenbosch University

Some professional educators were also employed at technikons, such as at Peninsula Technikon (PenTech). PenTech was the traditional alternative to students who were unable to obtain a place at university. Figure 3.4 shows the gender difference of permanent professional educators. More men were employed as professionals that females from 1986 to 1994, with an increase in employment for males and females in 2004. From the period of 1986 to 1994, each of the universities shows a lower number of women who were permanently employed as professional educators compared to men, with greater significance at UCT and SU. At UWC, the ratio between males and females were relatively similar across the same period. While the number of women employed at UCT fluctuated slightly from 1986 to 1994, there were gradual increases in the number of women employed as professionals at UWC and SU. Therefore, between 1986 and 1994, there was a slim chance for a woman to be employed as permanent professional educators at UCT and SU, with a greater

probability at UWC. The gender ratios for the three universities evened out twenty years after South Africa's first democracy.

In 2004, the DHET reported its last data collection for the technikons as all technikons were amalgamated per province. For example, Peninsula Technikon assimilated into Cape Peninsula University of Technology (CPUT); therefore, there was no explicit gender data for 2014.

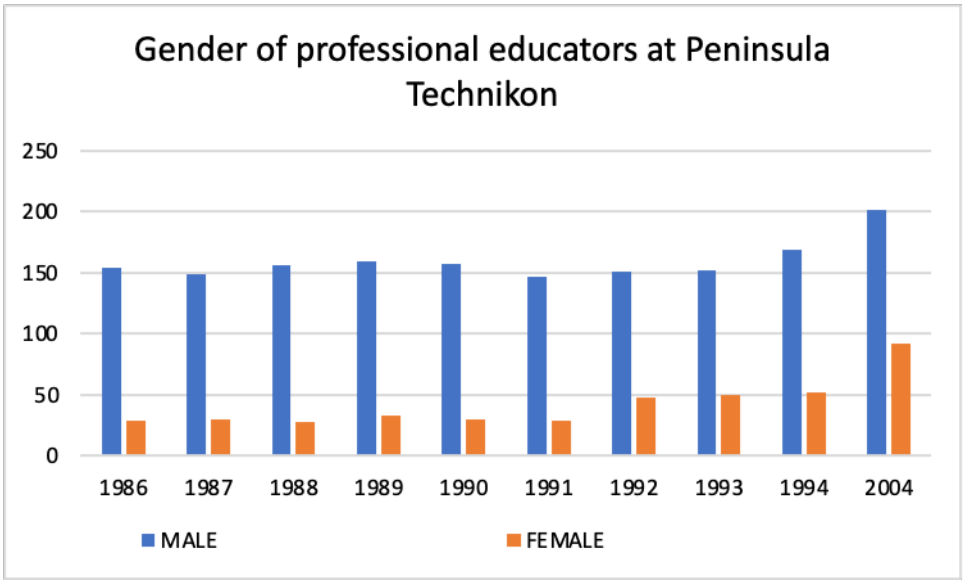


Figure 3.4: Gender of professional educators at Peninsula Technikon

Inasmuch as it was challenging for women to pursue roles as professional educators in higher education in South Africa, the challenge was greater if you were a woman and classified as black, Indian or 'coloured', as described next.

3.4.2 Women as professionals in higher education

Studies of individual lived experiences of black women in higher education in South Africa are increasingly evident in the literature (Madileng, 2014; Makhanya, 2016; Maseti, 2018; Msimanga, 2014; Ndlovu, 2014; Nkambule, 2014; Ramohai, 2014). As examples, Makhanya (2016), a black woman, shares the valuable educational role her mother played in influencing her as a professional educator in higher education. Makhanya's (2016) autoethnographic study highlights the neglect of recognising mentors from her community and the value a community mentor can bring to higher education. Ramohai (2014: 2984) shares her professional experience as a black academic entering a university into an unwelcoming white male-dominated space with unsupportive promotion criteria to further her career in higher education in post-apartheid South Africa. Maseti (2018: 343-344) reveals "an artificial barrier" to her sense of belonging in a higher education space as a professional educator who felt the need to prove her worth and capabilities. These authors demonstrate that

disenfranchising and marginalising experiences exist amongst black (and Indian) women in South Africa but, this study, provides a spotlight on a group who continuously function in the margins of society.

Figure 3.5 and Figure 3.6 show the percentages per racial groups, as reported by the DHET, for UCT and UWC respectively from 1986 to 1994, and then 2014. The graphs show categorisations used by the DHET, namely, white, 'coloured', Indian and African.

Figure 3.5 exemplifies the limited access to non-white professionals from 1986 to 1994, where the vast majority of permanent professional educators at UCT were white. The percentage of non-white permanent professional educators was negligible from 1986 to 1994, with a slight advancement by 2014. The data is significant because the percentages of the racialised groups of professional educators are, to some extent, inversely proportional to the percentages of the racial groups in the country, demonstrating inequality and discrimination in the timeframes of 1986 to 1994, and to a lesser extent by 2014.

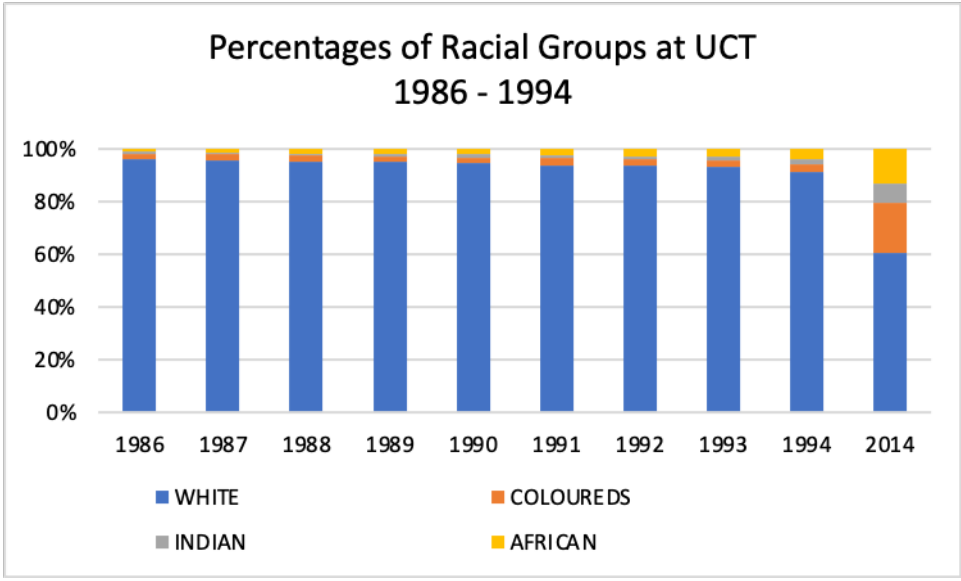


Figure 3.5: Percentages of racial groups of professional educators at the University of Cape Town

On the contrary, Figure 3.6 shows an increase in the number of 'coloureds', Indians and Africans at UWC during the same timeframe. The increase in non-whites at UWC is perhaps due to the non-racial admissions policy the university adopted in 1983, despite being designated by the apartheid government to those staff (and students) classified as 'coloured'.

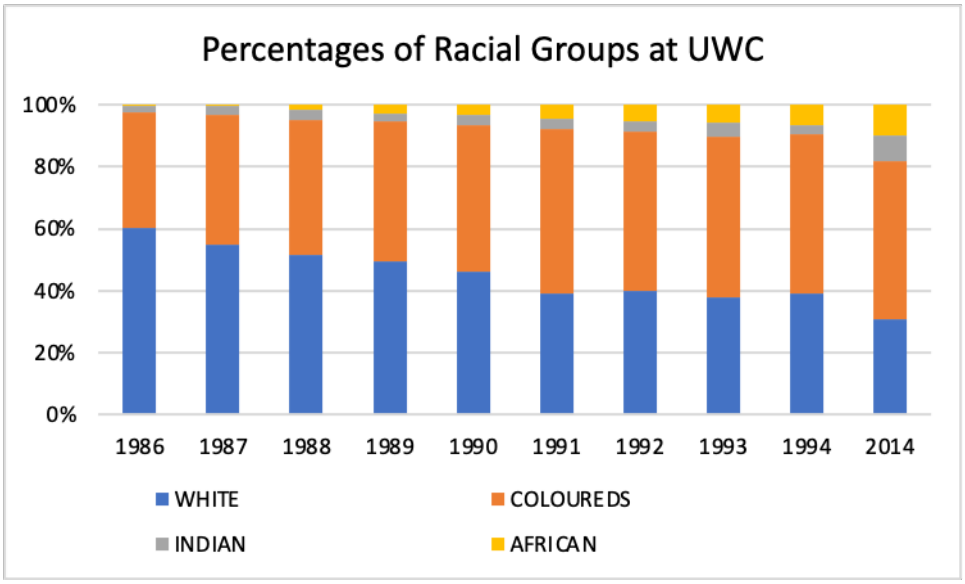


Figure 3.6: Percentages of racial groups of professional educators at the University of Western Cape

Some intellectuals opposed UWC as a higher education institution because it was set up by the apartheid regime in support of the racial segregation of 'coloureds' (February, 2016: 119). As was the case for some of the participants in this study, employment at a university was a privilege, and also an opportunity to exit the socioeconomic deprivation of the working class. Not shown in Figures 3.5 and 3.6, is a new group referred by the DHET in 2014 as 'other', which amounts to 2.3% at UCT and 13.7% at UWC. This percentage represents a category of professional educators who do not identify with the categorisations of white, 'coloured', Indian or African.

Furthermore, the choice of career of the participants in this study was likely influenced by the Department of Coloured Affairs, who restricted the field of study of 'coloureds' to predominantly the humanities, social sciences and education (Anderson, 2003: 34). For this reason, those who did not have the financial means to attend universities or were unable to qualify for bursaries had no other alternative for further education beyond secondary school, than technikons. Therefore, the vast majority of 'coloured' women (and men) were forced to accept a bursary from the Department of Coloured Affairs, and attend a technikon.

Figure 3.7 shows a comparison of racial groups at one of the most commonly attended technikons in the Western Cape.

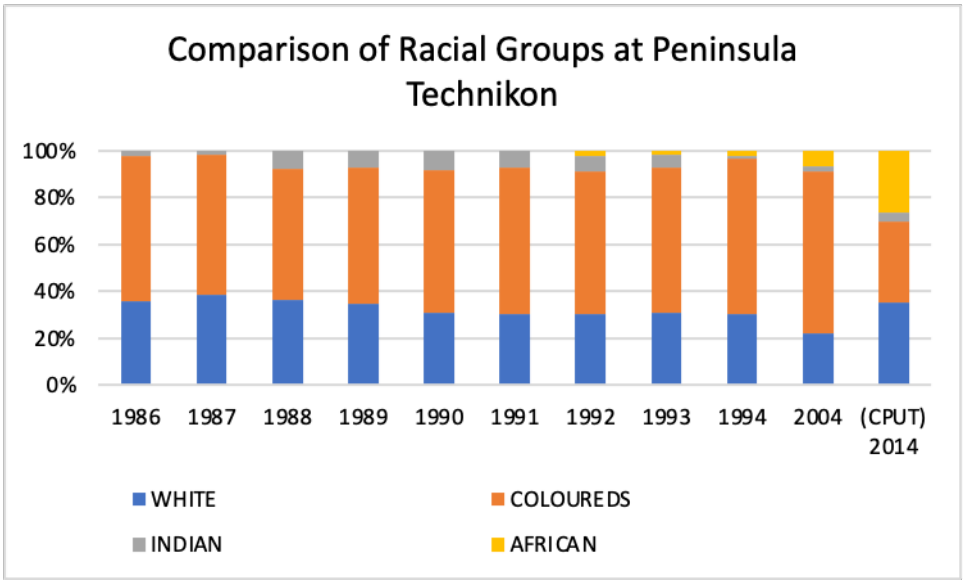


Figure 3.7: Comparison of racial groups at Peninsula Technikon

An analysis of the graphs in figures 3.1–3.7 highlight that for 'coloured' women, in particular, from 1986 to 1994, there were minimal options to pursue careers as professional educators at UCT, a likely probability at UWC and a negligible opportunity at SU, while, simultaneously, marginally slim for women relative to men at UCT and SU. There were specific technikons, like the Peninsula Technikon, which provided an entry point for 'coloured' women to be permanently employed as professional educators. In other words, the state was a gatekeeper to being employed at university and a technikon, and subsequently, a career pathway as a professional educator for 'coloured' women was almost non-existent at a university; alternatives into higher education had to be sought.

3.4.3 Teacher training colleges as an alternative

One of the career paths that the apartheid government advocated for 'coloureds' was teaching, made possible by the provision of a state bursary. In return, recipients of the bursaries were expected to teach in a primary or a secondary school. By the late 1980s, the Department of Coloured Affairs administered sixteen teacher training colleges as alternatives to universities, fourteen of which were located in the Western Cape (Council on Higher Education, 2010: 8).[10] Since larger populations of 'coloureds' lived in the Western Cape, and had geographical access to fourteen teacher training colleges, teacher education at colleges was the most likely entry into higher education, and also way out of socioeconomic deprivation.

[10] The Western Cape became one of three provinces of the Cape in 1994.

In comparison to universities and technikons, teacher training colleges for promising teachers fulfilled dual purposes: training-colleges that were centres for aspiring teachers who had completed standard 10 (grade 12 equivalent); and training schools, which accommodated aspiring teachers who had completed standard 8 (grade 10 equivalent) creating a two-tiered qualification system within college provision. Therefore, for 'coloured' women (and men), teacher training colleges were (limited) opportunities to post-schooling education. As will be discussed in Chapter 6, four of the seven participants in this study who registered for post-schooling education, attended Hewitt, Bellville, Zonnebloem and St Augustine's teacher training colleges in the Cape. While teacher education at universities focused on secondary school teaching, teacher training colleges focused on mainly primary school teaching (Wolhuter, 2006: 129). In 1996, the National Commission on Higher Education recommended that the teacher training colleges be incorporated into universities (National Commission on Higher Education, 1996: 82), and, in 2001 teacher education became the responsibility of higher education institutions (Ministry of Education, 2001). The incorporation meant that a teaching qualification obtained at a teacher training college required conversion to university accredited qualifications.

In South Africa, professional mathematics educators currently sit within two spaces of higher education – either within pre-service teacher training at universities; or as facilitators to in-service teacher training (as service providers or affiliates of higher education institutions due to a skill shortage of mathematics education specialists). Furthermore, a school subject like mathematics required specialisation at the university level and; therefore, beyond teacher training college level. Consequently, converting a teaching certificate or a teaching diploma in addition to a mathematics specialisation became essential after teacher colleges were closed in South Africa. Following the range of pathways in becoming professional mathematics educators, Jill Adler (2017: 3), an internationally renowned mathematics education professor in South Africa, suggested that "we would need to nurture the identities and specific expertise of (professional) educators who may foster the next generation of maths teachers".

3.4.4 'Coloured' women in higher education in post-apartheid South Africa

Berry and Mizelle (2006) shared the personal accounts of American women of colour who offered professional advice to other women of colour employed at universities. Studies on the particular experiences of 'coloured' women as a separate racially constructed category (as is the case in South Africa), have mainly focused on the personal and social challenges of these women by exposing the vulnerabilities they experience in their communities (Dada, Burnhams, Laubscher, Parry & Myers, 2018; Pitpitan *et al.*, 2016; Sawyer-Kurian *et al.*, 2009). At university level, the research focus has been on the experiences and challenges of 'coloured' female undergraduate and postgraduate

university students (Daniels & Damons, 2011; Snyder, 2014), emphasising the students' struggles with their insecurities around race and gender stereotyping, despite their high academic performance at university.

As examples, research of undergraduate 'coloured' women studying at a university during post-apartheid South Africa (Daniels & Damons, 2011) highlights the students' struggle with their insecurities around race and gender stereotyping, which led them to doubt their worthiness as students, despite their high academic performance. In turn, Timm (2016) provides an autoethnographic account of her exclusion as an undergraduate student based on her racial classification of 'coloured'. While she was keen to study her love of pharmacy, the university reserved for 'coloureds' was too far from her home province and the university closer to her home was reserved for Indians. After the Department of Coloured Affairs granted her special permission to study at a university reserved for whites, she deferred to her second choice - chemistry. Timm's (2016) account shows how the apartheid government had the power to influence her choice of study by rejecting and excluding her from specific universities. The consequence was that she was left with the feeling of not being good enough to be a pharmacist – her first choice.

In a study to explore the learning-journey of a 'coloured' professional mathematics educator, in particular, Rosenberg (2016), documents the restorative value of her self-study - how learning about the contexts that shaped her becoming has been a catalyst to finding her voice in an HEI. Following, Rosenberg (2016) questioned whether her writing was "maybe too personal for the mathematics education community she [was] part of" which raises the question of the criteria for acceptance into the mathematics education professional community. Snyder's study (2014) of female black, 'coloured' and Indian doctoral students in South Africa also identifies race and gender-based discrimination by students, faculties and educators giving a sense of not belonging to the institution (*ibid.*: 30). The 'coloured' women who were engaging with higher education in the study at undergraduate and postgraduate level (described as part of a bigger non-white group in the study), echoed messages of identity insecurity and not belonging to the HEI. It appears that women of colour outside of South Africa have similar experiences to 'coloured' women in South Africa. For example, STEM students experienced de-legitimisation of their skills and expertise, a feeling of not belonging, views of invisibility, and racialised and gendered experiences in a study of 176 women of colour in America (Wilkins-Yel *et al.*, 2018). Nonetheless, to date, there remains a dearth in the literature about the experiences of 'coloured' women as professional educators in higher education in South Africa.

3.5 A PREDETERMINED SCRIPT OF 'COLOURED' WOMEN

3.5.1 Sexualisation, substance use and violence

According to Cheryl Hendricks (2005), literature regarding the history of indigenous women of South Africa portrays an unbecoming identity woven with derogatory connotations. For example, Hendricks (2005: 34) describes the colonial period as a time when indigenous women, such as the Khoi, were viewed as an "animalist, abhorrent and [a] sexual[ised] group". Further, Henderson (2014: 948) adds that sexualisation and ethnographic exploitation of Khoi women is evident in the demeaning manner in which Sarah Baartman (1789–1815) was "groped, leered, and prodded at by the watchful eyes of a paying public", displayed in a museum in France under the guise of scientific enquiry. It can only be imagined how the violent intrusion, trauma and betrayal felt by a Khoi woman who was unable to defend herself by the dehumanised demeanour sustained by the watchful eyes of onlookers. Sarah Baartman, in a way, will forever carry the weight of a misrecognised indigenous woman, whose remains were only returned to her ancestral and birth home almost 200 years after her birth (Henderson, 2014: 948). Her story revealed how images of sexualisation were distorted and orchestrated in the minds of Europeans during colonisation. The distortion impacted the perception of particular women for the centuries that followed. Shortly after Sarah Baartman's death, women of mixed ancestry had formed the more substantial part of the prostitute community (Hendricks, 2005: 36). Therefore, the sexualised mind of the European marked the bodies of women of mixed ancestry.

Stereotypical, racialised and sexual claims about 'coloured' women continue in post-apartheid South Africa as depicted in a newspaper excerpt (Nicholson, 2011) perpetuating a belief of promiscuity and vulgarity:

> *You will always be assured of a large family as many of these girls breed as if Allan Boesak sent them on a mission to increase the coloured race… They are the closest thing to being a white woman and we know you black men love them as they look like they've popped out of an Usher music video… They have no front teeth and eat fish like they are trying to deplete the ocean … they love to fight in public.*

As another example, in a published book for educational purposes, called *The Rainbow Navigation Guide*, 'coloured' women (and men) were documented as follows (Staff reporter, 2017):

> *There's a little (unacceptable) thing called vat en sit, which refers to a man moving in with his girlfriend and, often, letting her pay for his expenses, … In some cases the girl falls pregnant. She then returns to her mother and makes peace with her (usually by*

> *apologising). The girlfriend moves in with her mother and has the child. She then leaves the child with the mother, and returns to the boyfriend.*

The depiction of 'coloured' women, in particular, demonstrates disrespectful and harmful assumptions on multiple levels: firstly, the assumption that marriage is not a preferred partnership amongst 'coloureds'; secondly, 'coloured' women are expected to pay for the expenses of their partners, with a likelihood of falling pregnant; thirdly, the statement also suggests that 'coloured' men do not take responsibility for their child(ren) and that the same is true for the mother of the child(ren), leaving the responsibility of raising the child(ren) to the grandmother. The publisher of the book agreed to an updated version of the book (Mosupi, 2017). Agreeing to update a book, in my view, does not demonstrate an adequate public response of re-humanising 'coloured' women (and men) in the public domain. Instead, like the lack of a sufficiently adequate response from the publisher, the alarming forecast of 'coloured' women (and men) are perpetuated. We see, therefore, from the two excerpts, that the function of stereotypes of 'coloured' women (and men) is to portray the messages of being 'coloured' as a "predetermined script to follow and understand" without any sense of individuality (Bowler, 2016) and, as such, "racial[ised] constructions of sexuality" are approved by society (Hicks, 2009: 420).

Academia has been no different in perpetuating racialised constructions of the sexualisation of 'coloured' women by dressing bodies of 'coloured' women with scientific terminology. Henderson (2014: 952) gives an insightful warning that "the perpetuation of [a] dominant culture's master narrative formations" frames our (mis)perceptions of women. Therefore, caution should be taken about the content of our documentation, of whom and by whom. In post-apartheid South Africa, risk-related studies of 'coloured' women regarding their sexual behaviour, substance use and violence continues to be researched in socioeconomically deprived areas (for example Adams, 2014; Lesch, 2000). Henderson's (2014: 952) warning should be taken seriously because, as Hicks (2009: 420) points out in her study of women of colour in a socioeconomically deprived area in New York, the women in her study felt that they were treated differently by authorities because of the "metalanguage of race" and the racial constructions of their sexuality. From my perspective, the metalanguage in the two published passages above gives the impression that 'coloured' women are: irresponsible, careless, violent, unreliable and helpless, which, in some ways, undermines some of the real experiences of violence and rape experienced by some women in deprived communities (Sawyer-Kurian *et al.*, 2009: 17) The metalanguage of race, such as the sexualisation, substance use and violence associated with 'coloured' women, feeds into a perception of the identities of 'coloured' women, creating a type of person. *This* study intends to provide alternative narratives of professional mathematics educators in higher education of women who were classified as

'coloured' during apartheid by giving 'coloured' women a voice. As I draw this chapter to a close, I am drawn to the words of Lugones and Spelman (1983: 573):

> *[I]t is the desire and insistence that we [as 'coloured' women] give our own accounts of these movements and actions. For it matters to us what is said about us, who says it, and to whom it is said: having the opportunity to talk about one's life, to give an account of it, to interpret it, is integral to leading that life rather than being led through it.*

3.5.2 Feminist contributions during apartheid

While some literature documents the political and heroic experiences of 'coloured' women (Russell, 1989), the focus has been on their feminist contribution, rather than an interrogation of the lived experiences of their 'coloured' identities. Of importance is that these women may not have identified with the classification and identity of 'coloured', but were classified as 'coloured' during apartheid. They were recognised for their contribution in the struggle against apartheid and include Shahieda Issel for her remarkable role in balancing motherhood and politics (Russell, 1989: 65), Florence De Villiers for her rise from a domestic worker to the Head of the Domestic Workers' Union (Russell, 1989: 168) and Gertrude Fester for her involvement in the United Women's Congress (Russell, 1989: 241). Some women who were praised for paving the way for feminism in South Africa such as Rozena Maart (Russell, 1989: 255); and Rhoda Bertelsmann-Kadalie (Russell, 1989: 297), who married across racial lines during apartheid and later steered her attention to gender equity. Post-apartheid, Patricia De Lille is by far the most prominent woman who has exceeded her role as a trade unionist, political activist and political leader who became a loud voice as a female activist (Reynolds & Richards, 2003: 213) and is currently a member of parliament in South Africa.

In post-apartheid years, newer cultural writers have challenged the silences and ambiguities of 'coloured' women and men's lives, including South African writers such as Rayda Jacobs, for example, in her novel of the emotional attachments of a 'coloured' people in *Sachs Street* (2001), Zoë Wicomb in her autobiography of *You can't get lost in Cape Town* (2008) and Nadia Davids' *An imperfect blessing* (2014); each changing the message and experience of 'coloureds' from a personal rather than stereotypical perspective. In a play by Nadia Davids, she gives a biographical account of a well-known, yet undocumented Cape Town activist, Zainunnessa 'Cissie' Gool, in support of returning the cultural heritage of 'coloured' women to South Africans (Davids, 2012). Notably, while each of these cultural writers would have been classified as 'coloured' during apartheid, they spent large chunks of their professional lives outside of South Africa, beyond the

predetermined script of ‘coloured’ women, highlighting what is achievable when potentiality is permitted to be enacted. Shirley Zinn is another example of a businesswoman and author, who forged an academic career abroad and returned in post-apartheid as a role model to all South Africans (Zinn, 2016). Inasmuch as the classification of ‘coloured’ during apartheid has been rebuked, and the predetermined script of ‘coloured’ women in post-apartheid South Africa is denied, the lived experiences and identities of each of the women, past and present, cannot be denied. In my view, denying a rupture of the ‘story’ of ‘coloured’ women denies the decolonisation, de-segregation and predetermined script of the identities of ‘coloured’ women.

3.6 CHAPTER SUMMARY

This chapter journeyed the categorisation of ‘coloured’ in different geographical, political and social contexts in European colonies. Thereafter, I turned my attention to its colonial influence in South Africa that created and fostered a ‘coloured’ identity that came with resistance. I described how intellectuals used education as a means of resistance. Nonetheless, separation and segregation of ‘coloured’ as a racialised classification was concretised via apartheid legislation, affecting all domains of life. Next, I showed how ‘coloured’ women turned to teacher training as a means to continue their education but, continued to be controlled by the apartheid regime, prohibiting careers in higher education, and maintaining a predetermined identity of slander and sexualisation.

The next chapter focuses on identity and identity construction by considering prominent theories of (mis)recognition.

CHAPTER 4:
IDENTITY CONSTRUCTION AND (MIS)RECOGNITION

4.1 INTRODUCTION

The narratives of the seven women in this study reveal their potentiality, frustration and, at times, anger in the context of their association to 'coloured' identities. In the previous chapter, I expounded on the construction of 'coloured' identities from the period of colonisation to apartheid. Post-apartheid South Africa remains a racially fragmented and stratified nation. While I agree that there will always be a lens through which society will make a standpoint to judge who we are, I oppose standpoints that limit and distort identities, particularly when identities are constructed through a racialised lens.

During apartheid, political opportunists like the National Party used the experience of 'coloured' marginalisation as a means to strategise political power (Lipton, 1989: 298). By wooing 'coloured' votes, making promises of improved socioeconomic life, political power remained in the control of whites. Two years into a democracy, on behalf of the ANC, Thabo Mbeki delivered a speech that focused on his passion and appreciation for being African (Mbeki, 1996). While his speech had strong echoes of a non-racial African continent, Mbeki failed to acknowledge the racialised context of South Africa within Africa. More concerningly, he failed to acknowledge a 'coloured' people as African. The consequence of a lack of acknowledgement of 'coloured' led to further marginalisation of an already displaced, and voiceless 'coloured' community.

Post-apartheid, the Democratic Alliance (DA) – the political party as the main opposition to the leading ANC – used several tactics to sway 'coloured' votes from the ANC. One key appointment was Patricia de Lille, the mayor of Cape Town from 2011 to 2017 – her appointment served to negotiate relations between the DA and the public. Following support from the public, she became the leader of the DA in the Western Cape from 2015 to 2017 – and a catalyst in swaying 'coloured' votes in the Western Cape. When De Lille felt manipulated in the DA and revealed her opposition to political manipulation, she was ousted in 2018. In response, the President of South Africa and leader of the ANC, Cyril Ramaphosa, attempted to woo the 'coloured' vote by the appointing De Lille in his 2019 cabinet. Inasmuch as De Lille is benefiting from her political appointments, she remains a pawn to attract her 'coloured' constituents – this time, to the ANC. In a sense, attracting *'coloured'* constituents maintains a group open to manipulation and abuse, thereby keeping a 'coloured' identity alive.

The focus of this chapter is on conceptions and enactments of identity. Identity is critical to personal formation and understanding. It is impacted upon by a myriad of internal and external contexts and processes – often beyond the control of individuals, particularly in their formative years. I am aware that our lives do not consist of one identity, and identities are interlocked and reveal themselves at different times and intersections (Gouws, 2020). However, the primary interest is how the seven women adopted the identity label of 'coloured', the extent to which it shaped them, and positioned or relegated them in South African society. Specifically, my interest is in identity construction and (mis)recognition; therefore, I will draw on three key theorists: Charles Taylor (1989, 1998), Axel Honneth (Honneth, 1995, 2007) and Nancy Fraser (Fraser, 1995, 2009a).

4.2 CONSTRUCTION OF IDENTITIES

4.2.1 Frameworks, potentiality and judgement

It is impossible to think of identity without the acknowledgement of a self. From my perspective, there is something intangible and universal to all individuals that remains constant, which reveals our intuitions and responses. According to Charles Taylor (1998: 28), the universal self appears to have a commonality, which is for each individual to strive to be true to himself or herself as an authentic life. For Taylor (1998: 31), the realisation of one's potentiality is something that only each of us can discover and verbalise and; therefore, to be true to oneself means to gift oneself with the opportunity to fulfil one's potentiality. It follows that each of us requires an understanding of the things that have significance to us that urges our intuitions and responses (Taylor, 1989: 34). Just like the women in this study, the narratives of the lived experiences will reveal the critical incidences that were of significance (or lacking) in their lives that promoted (or inhibited) their professional roles in the context of their 'coloured' identities. Their narratives will reveal their potentiality, perhaps their frustration and anger in the context of their 'coloured' identities.

Taylor (1989: 27) defines identity as "the commitments and identifications which provide the framework … [from] which I can try to determine … what is good, or valuable, or what ought to be done, or what I endorse or oppose". For Taylor (1989: 28), it is impossible to make sense of our lives without frameworks, as frameworks provide a platform from which individuals make their decisions. While some frameworks are fluid and changing, others remain unquestionable, dominant and constant. Frameworks are focal points from which we judge our lives and the lives of others, and from which others judge our ways of being (Taylor,1989: 16).

Taylor (1989: 27) argues that "[i]t is not what is meaningful and valuable in itself, but the commitments and identification to that which brings meaning and value that equates to an identity". Like commitment, identification is a process that shapes the lives of individuals, not as solitary

beings, but by social relations within social contexts (Appiah, 2005: 66; Brubaker & Cooper, 2000: 14; Jenkins, 2004: 5). Consequently, relating with ourselves, and with others, is an essential feature of shaping our lives because relating deconstructs and re-constructs the frameworks that bring meaning to our lives. How we relate to ourselves, and how we relate with others, and how others relate to us affects whom we think we are and, therefore, our becoming – that is, at times, we make sense of who we are in relation to others.

As will be shown in this study, our commitments and identifications converge through particular lenses that are influenced by our lived experiences and the context within which these lived experiences are exercised. The particular lenses through which the seven participants in this study 'see' their lives will reveal how 'coloured' identities were shaped and, perhaps, continues to be shaped. To understand identity construction, it is, therefore, vital to consider how individuals relate to themselves and how they relate to others.

4.2.2 Significance of social encounters

From Mead's (1964: 203) perspective, an identity arises during a social encounter with another individual. A dialogue with oneself and the other is encouraged by taking the attitude of another into account. Likewise, Taylor (1989: 35) expresses that a self cannot be described without "reference to those who surround it". Cooley (1956) extends the views by iterating that it is neither possible to think of ourselves without reference to a social group or to think of the social group without reference to ourselves. Cooley's view is impressive because it means that, perhaps, the women in my study cannot think of themselves without referring to a 'coloured' identity and vice versa. Equally important is Mendieta's (1997: 498) caution of creating negative images of ourselves or 'interiorising' images that others have of ourselves. 'Interiorising images' means to claim an identity that is born from someone else's representation. For this study, I will, therefore, be attentive of the participants' narratives to identify their view of how others perceive them through the lens of 'coloured' identities.

Mead (2003: 37) suggests that there are two stages to the formulation of the self (identity construction). In the first stage, the self consists of attitudes of others toward the self in the social experience that the self is engaging in with other individuals. The type of social experience is similar to a child and a caregiver, where the child mimics attitudinal behaviours of the caregiver, such as by parents, family and teachers. Forms of behaviours, like love, contribute to how the child relates to herself and impacts on her self-confidence (Erikson, 1980; Honneth, 1995; Winnicot, 1965). As is the case for the seven participants in this study, the experience of relating brings to the fore the impact that the caregiver has on the child's worth, and trust in herself and her caregivers

(Erikson, 1980: 92-93). The significance of her self-worth and trust is when she begins to see similarities and differences in the way she is (mis)treated by others such as by parents, family, neighbours, teachers and strangers as the external environment finds its way into the child's life.

In the second stage – the fuller development of the self – Mead (2003: 37) suggests that the self is constituted of a social group or group of attitudes that are brought into the space of the self's field. This results in the child taking on the pattern of the group. This formulation of the self suggests an interaction between the self and the attitudes of the generalised others by absorbing the attitudes of a social group. By attitude, Tugendhat (1986: 241) suggests the "normative expectations that members of the group have regarding their behaviour"; normative meaning the social rules that are taken into consideration within the group, which Tugendhat describes as 'generalised demands'. While the attitudes or 'generalised demands' of a social group may be assimilated into the self, the relationships between the self and the collective should not define who we are. Instead, it should serve as a catalyst to fulfil whom we want to become (Taylor, 1998: 33). It may, however, be difficult if the attitudes of the social group persistently convey messages of low expectations and diminished worth. In essence, the attitudes of the social group can either contribute towards a definite sense of being, stifle or skewer whom we think we are. Taylor (1998: 33) believes that language is always used in dialogue with others; therefore, language is significant in establishing who we are. By language, Taylor implies the way we express ourselves, for example, through art, our love for others and our gestures. However, for Taylor (1998: 32), it is not only about the use of language as a means of expression. It is also about a struggle against others, particularly regarding what others expect from us.

However, if the transformation to (and throughout) adulthood does not allow for an individual to be recognised, then Honneth (2007: 74) believes that the transformation to adulthood must have had obstacles. He believes that these obstacles cannot be explained with rational reasoning, like language as an obstacle to adulthood. Instead, the obstacles, he explains, are consequences to an "intersubjective condition of human identity development" (Honneth, 2007: 74). Therefore, if language is not the core of developing one's identity, then, Honneth (2007: 74) argues, recognition becomes a means of communication. Moreover, in order to analyse obstacles in society, social rationalisation, like language communication, needs to be replaced with social recognition. Thus, Honneth posits recognition as an identity model because he says, if the moral expectations of individuals are breached, then identity construction lies within the negative experiences, as misrecognition. Moral expectations of individuals are breached when individuals are denied the recognition they feel they deserve (Honneth, 2007: 71).

Fraser (2000: 112) disagrees with Honneth's identity theory of recognition because, she argues, an identity model presupposes that those individuals who are misrecognised through social encounters are left to reconstruct their identities by themselves. An identity politics displaces an issue of redistribution as it does not take into consideration economic inequalities. Support for reconstructing identities is important to Fraser and, she emphasises, must take into account the harms constructed and imposed on misrecognised individuals by (government) institutions. In Fraser's (2000: 110) words, the identity model is "theoretically and politically problematic" because it reifies a social group on the same level of inequality and hierarchy created by institutions. On one level, Fraser is suggesting that an identity model of (mis)recognition encourages sameness within a social group as well as differences amongst social groups. On another level, Fraser is stating that an outcome could include the individuals feeling pressured to conform to the social group while, also promoting inequality and hierarchy of social groups.

To some extent, I agree with Fraser (2000: 110-113) that (mis)recognition is a form of status subordination and maldistribution. When one is part of a subaltern group that experiences social and economic injustices, the identities of the subaltern group, just like a 'coloured' social group, can give individuals a false sense of a subordinate identity. While the drivers of subordination in South Africa was the legislation imposed by the apartheid institutions who misled people by reifying racialised social groups, this study deliberates the rupture of the 'coloured' identity as a marker of a 'coloured' racialised group. Instead of a focus on status subordination and maldistribution, it is the recognition of the individual women of this study in South African society, as a whole, that is challenged, as opposed to the recognition of a 'coloured'-specific group. Furthermore, this study is limited to the lived experiences through the lenses of the women and not through the lenses of the institutions who implemented legislation.

As such, lived experiences of the women matters more than their interactions with larger institutional (government) patterns of behaviour, as suggested by Fraser. Accordingly, I am positing Honneth's identity model of (mis)recognition as a theory for this study because it permits the realisation of the women's needs and desires as individuals, rather than as a 'coloured' group. I am drawn to the words of Honneth (1995: vii) that "one's relationship to oneself, then, is not a matter of a solitary ego of appraising itself, but an intersubjective process, in which one's attitude towards oneself emerges in one's encounter with an other's attitude towards oneself. Honneth refers to this intersubjective process as a 'practical relation-to-self', because, as will be revealed by the narratives of the seven participants, it is not only about their beliefs and emotional states that matter for identity construction but also the experience of relating with others. As will be shown in the study, an individual can have a distorted view of themselves if their socialisation reflects a subordinated

and oppressed image of who they are (Taylor, 1998: 25), which, in itself, can be perceived as an injustice. Supporting Honneth's theory does not mean that I oppose Fraser's stance of status subordination and maldistribution. Instead, I remain cognisant of Fraser's views.

4.2.3 Relating to oneself and others

Honneth (2007: 224) posits that identity construction can only be developed and maintained by a necessary struggle for self-realisation. By self-realisation, he refers to the opportunity for all individuals to have the desire to "perfect themselves of their own free will" for the moral and the ethical good of its society. Honneth's interest in social theory does not lie with injustice *per se*, as is the case of theories by, for example, by Fraser (1995, 2000, 2008a, 2008b, 2009a, 2009b, 2013). For Fraser (2000: 116), social injustice lies in the dimensions of recognition and distribution of goods. Social injustice, as understood by Honneth (1995: vii), is when one's inner voice becomes violated by negative experiences while engaging with others during one's journey of self-realisation. Honneth (2007:74) argues that the construction of identities relies on relating, practically, with oneself. I am particularly drawn to Honneth (1995: vii) who emphasises that the practical aspect of relating has a purposeful intention of studying ordinary experiences of people, just like the exploration of the lived experiences of the participants in this study[11]. For Honneth (2007: 69), critical theory must be able to show that it is capable of demonstrating a practical reality before it begins to make a theoretical standpoint. In this study, I have found theoretical standpoints problematic precisely because, in some ways, it denies the value of lived experiences.

Honneth (2007: 138) builds on Mead's (1964: 204) theorisation of identity construction by postulating an alternate theory, which is cognisant of relating with oneself. By relating with oneself, he implies a sensemaking process that an individual constructs of herself (or himself) with regards to her (or his) potentiality and rights (Honneth, 2007: 135-136). He argues that relating to oneself is a struggle; however, this type of struggle does not necessarily mean a conflicting interest with oneself. The struggle that Honneth is referring to is a moral, social struggle, which comes into being when one encounters another individual. The struggle is a necessary criterion for identity construction, deliberated by mutual recognition (Honneth, 1995: xi). Furthermore, mutual recognition is challenging as it is not always evident because the impact of the encounter may be felt long after the encounter itself. Often one hears expressions of people 'clicking' without having

---

[11] The German phrase *anerkennung* of recognition is preferred by Honneth, instead of *wiedererkennung*. The former denotes the practical sense of recognition while the latter emphasises a re-identification.

the words to articulate its precise meaning, which, for me, can be interpreted as mutual recognition between two people.

Relationships of mutual recognition, therefore, become essential for the possibility of identity construction. Construction of identities of the participants in this study depends on the verbal and non-verbal interactions between the women and significant others. The very possibility of identity construction, Honneth (1995: xii-xviii) claims, depends on modes of relating to oneself, made possible by mutual recognition. As McBride (2013: 45) points out, at times, we need external relationships to determine the nature of our relationship with ourselves. I want to refine McBride's words that, at times, we need to pay critical attention to our encounters with others, in order to examine our relationship with ourselves. Honneth's theory of identity construction beckons an understanding of recognition itself.

4.2.4 Our authentic selves

Contrary to Honneth, Taylor (1998: 31) views authenticity as a pre-requisite for self-realisation. He describes authenticity as "my own particular way of being" and, therefore, an inwardly generated identity. Though I agree that authenticity is a necessary ingredient for a sense of value to oneself and that it allows for a uniqueness that one can contribute to society, I also believe that one's contribution to society is somewhat negotiated in relation to others. Without mutual recognition, the negotiation can lead to a power struggle for recognition, and the call for authenticity lost in the negotiation. McBride (2013: 42) cautions that "[o]ur desire to distinguish ourselves as special and unique may threaten to undermine our commitment to respecting others as equals", which is concerning to me.

For authenticity to be acknowledged, universal acknowledgement of the authentic offer between oneself and the other is necessary. If the other fails to acknowledge the offer, authentic or not, then the offer may not be recognised for the good of its society. In other words, the offer is dependent on the sense of value the other places on it, instead of the authenticity of the offer itself. It is the tension between one's authentic offer and the sense of value of the offer, as an authentic contribution to society, that Taylor (1998) fails to explain.

4.3 THEORY OF RECOGNITION

4.3.1 Recognition as a prerequisite to dialogicality

Inasmuch as there are collective identities, my view is that the formation of individual identities is developmental and dependent on the interaction, both verbal and non-verbal with another individual, and the experiences that each individual brings to the encounter. The encounter is

twofold; firstly, the interaction of two individuals becomes personalised and, secondly, the encounter creates a dialogue with oneself.

Taylor (1998: 34) is of the view that one's identity is dependent on "dialogical relations with others", and not an isolated occurrence. However, Honneth (1995, 2007) believes that a prerequisite to dialogue with another individual is mutual recognition of each other. This makes sense when one reflects on one's own encounter with an other. The other becomes significant when one values the contribution the other can make to the encounter and vice versa – that is, a recognition of each other. If one or the other is not recognised, then the contribution of each may become of less (or more) value to the construction of our identities. Furthermore, the decision of the value of significance may not be a conscious decision, and is dependent on the socialisation that one brings to the encounter. Of importance is that during the encounter of two individuals, there is a moment of mutual recognition that becomes significant in confirming or questioning who we are. The confirming or questioning of who we are formulates our ideas of self-realisation and also what we perceive as (in)justice.

As McBride (2013: 41) puts it, "What matters, then, is not whether the terms of recognition are, from some perspective, universal or particular, but whether these terms are under which one wants to be recogni[s]ed, and whether others will, or more accurately, *can* recognize you in this way". Subsequently, one's relating to oneself is key to determining who we are and, as importantly, how we wish to be recognised by others. For the women in this study who grew up amid the social construction of a 'coloured' identity, the issue at hand is the recognition they may have wanted and the (mis)recognition they may have felt while relating with others.

4.3.2 Self-confidence: Valuing one's needs of care and love

For Honneth (2007: 130), a definition of recognition is unclear and requires clarification. Honneth (2007: 132) builds on theses of recognition by Hegel (Petry, 1978) who stipulates three forms of self-relation, namely, love (from a perspective of unity), respect (from a moral perspective), and esteem (in light of contributing to a social order). Honneth (2007: 135-136) relates Hegel's three forms of self-relation as his theory of recognition to, firstly, "the value of one's own needs"; secondly, "the awareness of being a morally accountable subject" and; thirdly, "the awareness of having good or valuable capabilities". By the value of one's own needs, Honneth (1995: 95) means the development of one's self-confidence, which he relates to care and love relationships, usually with those with whom we have strong emotional attachments. Examples of love and care relationships are fostered between a caregiver and a child, amongst friends and between lovers.

For Erikson (1980: 93), the trusting stage of an adolescent, like that of a young 'coloured' girl, is important during her first experiences of "equality of opportunity", such as love and care relations with another. The significance of her period of adolescence is that if she begins to see a difference in the backgrounds of her caregivers and loved ones, differences in their skin colour and the socioeconomic and political consequences thereof, then she will make decisions about her sense of worthiness. For the women in this study, the experiences of the self, in their homes and their communities is of significance, not only because of the context of their personal lives, but also the contexts within which their parents found themselves with regards to *their* homes, *their* education and *their* workplaces.

There is an additional factor that influenced the lived experiences of the women in this study, which is the political unrest within which they found themselves. Families were displaced by forced removals with severe consequences (Bowers Du Toit, 2014). Family members were arrested and charged or killed, and states of emergency were enforced to minimise movement in urban communities (Tutu *et al.*, 1998). Winnicot (1965: 40) pointed out that gradually, the external environment finds its way into a young person's life through family, neighbours and teachers and, consequently, one's upbringing and interpersonal relationships during adolescence is crucial in formulating one's confidence in oneself. Taylor (1998: 33) believes that the voices of significant others, like our family, neighbours and teachers, remain in our minds during our lifetime, reminding us of who we are and our becoming. In my view, in the process of constructing our identities, we hear the voices of our significant others who continually encourage or haunt our minds with our (in)capabilities.

For 'coloured' women (as was the case for all women and men in South Africa), friendships and intimate relationships were restricted and segregated by law. For example, the Group Areas Act 41 of 1950 (Union of South Africa, 1950b) designated residential zones for particular racial groups, allowing minimum engagement across racial groups by the creation of physical boundaries and buffers (like parks, railway lines, rivers, highways). Some mobility was permitted across racial groups by the apartheid government, such as in white-led government bureaucracies (Goldberg, 1993: 193). At the same time, the Group Areas Act of 1950 prohibited freedom of movement between residential zones of racial groups, other than movement within a residential zone that was restricted to a particularised racially classified group. Furthermore, the Prohibition of Mixed Marriages Act 55 of 1949 (Union of South Africa, 1949) banned marriages across racial lines, creating further segregation. Nonetheless, where friendship and intimate relations occurred, the relations were in secret, and at their own risk. In other words, the important love and care relationships, proposed by Honneth (1995: 95) that are needed to promote self-confidence, were

restricted and prohibited across racial lines. The self-confidence of a 'coloured' woman was born from the premise of the marking of her body, branded like an animal, by the colour of her skin with consequences of limiting her friendships and lovers based on race. Therefore, she was also denied the opportunity to be her authentic self (Taylor, 1998).

4.3.3 Self-respect: A morally accountable subject

During apartheid, the rights of most legally mature individuals, including the participants, were denied. The basic denial of human rights created stratified complexities, with regards to individual rights, and when individuals were part of a social group that perhaps demanded different rights. Honneth (2007: 140) assures us that the rights he refers to in his theory of recognition, are rights that include moral deeds. For example, the women in this study were denied their right to love or befriend whomever they wanted. The women were also denied living harmoniously in the broader society by the legislation of separate amenities, such as, by racialised beaches, toilets, banks and public transport seating arrangements.

For Honneth (2007: 135), the "awareness of being a morally accountable subject" in the public domain has an association with the development of one's self-respect, both between two individuals and social groups seeking respect. Honneth (2007: 139) refers to the awareness of being a morally accountable subject as a form of 'moral respect', and universal respect that he associates with equality between individuals and across social groups. He continues that moral respect occurs when every individual is "ascribed the same moral accountability as every other human being" (Honneth, 1995: 112, 2007: 139). This means that every human being is entitled, by birth, to the same status and treatment as any other individual, within and across social groups, which usually comes into practice when an individual becomes legally mature. Restated, relations with oneself are shaped by the rights of individuals within the public domain. Rights within the public domain are essential components of self-respect. For the women classified as 'coloured' in this study there was no equal status and treatment compared to their racialised counterparts.

Within the curtailment of basic human rights, was the denial of equal and equitable education compared to that afforded to whites. Following the 1976 mass protests, the ruling National Party looked for means to break the solidarity amongst the increasingly unified masses. In order to concretise racial separation and segregation, the apartheid government introduced three racialised Houses of Parliament: a House of Representatives (for 'coloureds'), House of Delegates (for Indians) and a House of Assembly (for whites), which excluded blacks (Lipton, 1989: 52). One idea behind the Tricameral Parliament of 1984 to 1994 was for the leaders of the National Party to gain the support of 'coloureds' (and Indians) by giving them a limited voice in parliament (Dollie, 2011:

87) to 'herd in' 'coloureds', particularly in the Western Cape where statistically a 'coloured' population formed 57% of the voters (Giliomee, 1995). Patronage was given to supporters of the different political Houses and, through these Houses, the apartheid government controlled education. There were 19 different education departments assigned to different racial and ethnic groups. Subsequently, the House of Representative became the machinery for implementing the apartheid state's control of 'coloured' education. Education was used as a means to empower a minority while, simultaneously, disempowering and disenfranchising a majority – it was very powerful and critical to keeping the apartheid government in place.

4.3.4 Self- esteem: Valuable capabilities to the community

In this section, I turn my attention from relations between individuals to relations between an individual and her community. While we have a duty to love and care for all individuals in our primary relationships to affirm who we are, and a mutual duty to respect each other, individuality also makes one unique and special as contributors to our communities. Taylor (1998: 30) speaks of an authenticity, an "original way of being human", which he translates as "a certain way of being human that is *my* way" of living one's life. In my view, the unique contribution that one can make to a community is one's individual expression of a particular and original way of being human.

From the perspective of Honneth (2007: 36), an "awareness of having good or valuable capabilities" that can contribute to one's community is connected to the development of one's self-esteem. By this, he means that one should use the traits and characteristics of an individual as an opportunity for new possibilities for the community. In other words, if an individual cannot articulate what she has to offer that is of value to her community, then she does not have a sense of her identity within her community. Taylor (1989: 27) refers to a lack of a sense of one's identity as an identity crisis. Perhaps having an unbeknown view of the value one brings to a community can also be considered as an identity crisis. I would also go as far as to say that, perhaps, not knowing which community one is part of, can also be considered as an identity crisis. For the women in this study, there may have been challenges in conscientising their choice of communities, whether this is family, friendship groups, neighbourhoods, school, tertiary, mathematics and political communities. Therefore, clarity is required regarding what constitutes a community.

According to Honneth (2007: 140), a form of solidarity between the individual and a community is required. By solidarity, he means that which is for the common good of a 'concrete' community. However, he also adds that solidarity is that which is valuable to the community so that the contribution made by the individual matches the needs of concern of the individuals in the particular community. The needs of concern, he continues, include any project that ends the

dehumanisation of particular social identities. I want to rephrase the value an individual can contribute to a community, which is to re-humanise the social identities of communities. The relevance of a community lies in Honneth's (2007: 140) view of situating esteem "in the horizon of values of a particular culture". I use the term culture with caution because I do not want to equate any identities to particular cultures, nor am I attempting to essentialise identities. Instead, I am emphasising that one's socioeconomic conditions, which was an oppressive reality for many people classified as 'coloured' in South Africa, influenced what mattered as 'worthwhile' in their choice of community allegiance.

For Honneth (2007: 76), there is also a sense of recognition in occupations and the tasks associated with these occupations as communities which, for Honneth, are ranked by society. This means that recognition is also determined by the value society places on particular occupations – a type of social esteem. If one is in solidarity with agreed values of an occupational community, then Honneth (1995: 113) suggests that one's self-esteem will be enhanced. In my view, there is a tension between self-esteem and social esteem, which the participants may have had to come to terms with, and live with in their professional becoming.

Honneth posits that the third form of self-relation – that is, self-esteem – is central to changing social patterns of a community in order to form a new social identity. For McBride (2013: 108), esteem is useful on an individual level, but he adds caution to collective groups, as collectives may risk "pitching us into a morally unacceptable and politically destabilizing politics of competition and hierarchy". While I agree with McBride, the purpose of this study is to do something different. It is, in part, to conscientise ourselves of the lived experiences of women who were dehumanised by hierarchies of apartheid and post-apartheid imposed on them; and, as far as possible, to change the demoralising narratives of the women, as a consequence to the marker of a 'coloured' identity. In other words, a re-humanisation of their social identities.

4.4 MISRECOGNITION

Honneth (1995: 121) iterates that the love and the respect granted to individuals by primary caregivers need to be repeatedly experienced by each individual. The repetition is necessary so that the individual can view her abilities and, therefore, her esteem from a positive perspective. In other words, the three modes of relating to oneself are intricately and intersubjectively dependent on each other for self-realisation.

While Honneth (1995, 2007) and Taylor (1998) link identity to recognition, Fraser (2000: 108) rejects the identity models because, in her view, identity models of recognition create problems of displacement and reification. Fraser (2000: 119-120) proposes a "non-identitarian politics" that she

believes can remediate misrecognition, without encouraging reification and displacement. While identity models of recognition can contribute towards specific issues of subaltern groups, she says they pose problems on a socioeconomic and political level. Inasmuch as Honneth views misrecognition with negative connotations of humiliation and degradation, he omits to offer a solution to problems of displacement and reification, perhaps because his concern lies with self-realisation, not with status subordination or economic disempowerment. To be misrecognised, or as Honneth (2007) puts it, to be disrespected, is morally unjust and can have serious effects on one's relation to oneself. For Honneth, misrecognition alters self-confidence, it denies rights, and subjects individuals to stereotypes that, over time, evolve into a view of particular types of persons. Therefore, misrecognition can lead to a limited and distorted view of who we are (Taylor, 1998: 25).

Fraser (2000) acknowledges that identity models, such as that of Honneth and Taylor, can help to address issues such as that of racism, sexism, colonisation and apartheid. However, she believes that the identity models of recognition are problematic, both theoretically and politically, because the politics of identity ignores the politics of distribution. To an extent, I agree with Taylor as the identity models of recognition do not enforce change from the institutions, like government institutions, to take responsibility for *their* role in the misrecognition of individuals who enter their institutional spaces. An example is the women in this study who entered higher education spaces in their careers and experienced misrecognition of their identities on an institutional level. Saying this, the purpose of this study is limited to an exploration of the lived experiences and identities of 'coloured' women in higher education, not an exploration on the role that higher education institutional spaces played on the identities of 'coloured' women. I do, however, acknowledge that identity models of recognition assume that it is the individual's responsibility, like the women in this study, to (re)construct their identities on their own. I am not comfortable with this statement, but for the sake of this study, I will have an awareness and an appreciation of this tension in order to rupture the existing scholarship of 'coloured' women.

4.5 CHAPTER SUMMARY

This chapter focused on understanding the perspectives of identity and identity construction. While I was aware that our lives consist of a multiplicity of identities, I wanted to place attention on a 'coloured' identity to understand how it was shaped and positioned in South Africa and how it affected people. While I also agree that there will always be a lens through which society will make a standpoint to judge who we are, I oppose standpoints that limit and distort identities, particularly when identities are constructed through a racialised lens. Following, I drew on key theorists Charles Taylor (1989, 1998), Axel Honneth (Honneth, 1995, 2007) and Nancy Fraser (1995, 2009a) to gain

insight into identity construction its interrelation with (mis)recognition. It has been an important exercise to journey theories about the construction of identities mindful of race and race construction (Chapter 2). The exercise helped inform the research methodologies that would illuminate the voices of seven 'coloured' women as professional mathematics educators in higher education, South Africa.

The next chapter draws attention to the research methodologies to answer the research and sub-research questions. It will also expound on issues relating to transparency, validity and confidentiality, and the ethical considerations taken into account for this study.

CHAPTER 5:
RESEARCH METHODOLOGY AND CONTEXT

5.1 INTRODUCTION

There is a dearth in research about the lived experiences of women classified as 'coloured' during apartheid and the influences or limitations to their potentiality in their adult working lives in a democracy. The focus of this research study is the lived experiences and identities of 'coloured' women who embarked on careers as professional mathematics educators in higher education. This chapter describes the research paradigm, the research methods, and the research context. The sampling strategy, biographical information of each of the participants, validity and confidentiality, ethical considerations, as well as the limitations of the study, are also explained.

To begin this chapter, a reminder to the reader that the main research question for this research study was:

> How have the lived experiences and identities of 'coloured' women in South Africa determined and influenced their roles as professional mathematics educators in higher education?

The research sub-questions are:

- What were the schooling experiences of women who were classified as 'coloured during apartheid?
- What were the tertiary education experiences of women classified as 'coloured'?
- What were the experiences (highlights and challenges) of pursuing a career in mathematics education during post-apartheid South Africa?

5.2 INTERPRETATIVE AND PHENOMENOLOGICAL RESEARCH PARADIGMS

The research paradigms for this study are interpretivism and phenomenology. Deciding on research paradigms was not an easy decision. As a participant in this study, I wanted to share the untold stories of seven 'coloured' women as we understood our lives but, I also wanted to engage with the data critically, as a researcher. I came to understand that there was nothing fixed and separate about my roles as a participant in this study and as the researcher. Once the fluidity of these roles became apparent to me, I began to understand that the stories of the participants and my account as a researcher, depended on each of our interpretations within our contexts, with the possibility of multiplicity in meaning.

As I came to understand the participants better and read the literature regarding this study, an understanding of myself and the study changed. In other words, through an iterative and reflexive process, I began to have a deeper sense of what is meant by "a particular way of seeing the world" (Coe, 2012: 6). I was also cognisant of the socioeconomic conditions and possibilities of exclusion that may have affected the lives of the participants (Gouws, 2020: 184).

Drawing on the Greek (*paradeigma*) and Latin (*paradigma*) origins of the term paradigm, Groenewald (2004: 44) describes a paradigm as "the patterning of the thinking of a person; it is a principal example among examples, an exemplar or model to follow according to which design actions are taken". The research paradigms for this study, namely interpretivism and phenomenology, are discussed next.

Cohen *et al.* (2011: 17) articulate that an interpretive research paradigm is "characterized by a concern of the individual" to understand the "subjective world of human experience". The authors' perceptive understanding of individuals (and events) are of significance to this study and based on the following features:

- Individuals (and events) are unique and mostly non-generalisable;
- there are multiple interpretations of, and perspectives on, single events and situations;
- reality is multi-layered and complex; and
- we need to examine situations through the eyes of participants, not only the researcher.

These points brought to mind that the 'knowledge' sought from each of the participants required a re-voicing of their lived experiences and identities. Huber, Caine, Huber and Steeves' (2013: 216) contribution of consciousness and attentiveness to the harmonious and fragmented aspects of our lives when re-voicing, was a helpful reminder during the study. Building on the view of Babbie and Mouton (2001: 28) who stated that we "continuously interpret, create, and give meaning to, define, justify and rationalize our actions", I turned to Cohen *et al.* (2011: 18) who posited an interpretivist research paradigm as a way of gaining insight into multifaceted ways of being, ways of thinking and ways of expressing situations and contexts. Therefore, an interpretivist research paradigm was pertinent to this study.

This study is also a first of its kind to 'hear' the voices of professional 'coloured' women employed in higher education spaces, as they reveal their lived experiences. Thus, narratives of lived experiences are core to this study. According to May (2012), narratives help make sense of our understanding of our identities, make sense of our world and the world around us, and help to communicate our experiences of our worlds to others. She iterates that the stories we choose to share matter, how we choose to share these stories matter and, the authors revoicing our stories

matter. As a researcher, I was tasked to facilitate the un-weaving of the complex tapestry of each of the research participant's stories so that I could gain an in-depth understanding of each of the women's interpretation of their lives.

Next, I was tasked to rethread their lived experiences (stories) to make possible a rich analysis of their identities. In this regard, I found the idea of a phenomenological paradigm especially useful. To understand whether my thinking had synergy with a phenomenological paradigm, I drew on the seminal ideas of Edmund Husserl (1859–1938). Husserl placed attention "back [on] the things themselves", made possible by a personal consciousness that allowed the essence of phenomena to emerge (Eberle, 2014: 186; Groenewald, 2004: 43). Husserl referred to a 'subjective consciousness' as "the locus of cognition with the best evidence", meaning that *cognition required a consciousness that was bound to something that is recognised.* This ensemble refers to a phenomenon. He distinguished between the '*noesis*' and the '*noema*' of a phenomenon, describing a phenomenon as a "*noetic-noematic* unity" (Eberle, 2014: 186).

For Babbie and Mouton (2001: 28), phenomenological traditions emphasise understanding people rather than intentions to explain people. To the authors, people are not merely conceived as biological organisms but, more importantly, conceived as "conscious, self-directing symbolic human beings" (*ibid.*). By way of example, being conscious means that as human beings, we are engaged in processes of making sense of our lives – the stories we tell ourselves and others are fundamental in our lives. Cresswell (2014: 13) shared that phenomenological research includes an in-depth engagement with a small number of participants "to develop patterns and relationships of meaning" and, to make this possible, lived experiences became my data.

My study elucidates making sense of lived experiences through a lens of race in relation to (mis)recognition and identity construction. A phenomenological paradigm brought meaning to the inner consciousness of the women concerning their lived experiences as 'coloured' women professional mathematics educators in higher education.

5.3 RESEARCH METHODS

5.3.1 Single case study

From the outset of this study, Yin's (2009: 8-9) recommendations on the use of 'how' and 'what' questions for an exploratory study influenced the construction of my purpose statement and my research and sub-research questions. Once I constructed my research and sub-research questions, a structure for the research was necessary. Yin's (1994) structured approach to a case study helped me to decide on three aspects, namely, the central focus of the case study, the unit of analysis and

the boundaries of the study. Based on these three aspects, I identified the central focus of the case study as the lived experiences and identities of 'coloured' women. I defined lived experiences as the choices that the women chose to share about their childhood and adulthood in relation to their education while attending their primary and secondary schools and tertiary institutions. I selected the units of analyses as 'coloured' women who were professional mathematics educators. I defined the parameters of the study as women classified as 'coloured' during apartheid in South Africa and who were pursuing (or had pursued) roles as professional mathematics educators during post-apartheid South Africa.

One of the difficulties I experienced was a decision between a single-case study or a multiple-case study. While I considered a multiple-case study design, I decided against this. Yin (1994: 45) describes a multiple-case study design equivalent to "*multiple experiments* (his emphasis)". A multiple-case study design did not imply multiple participants, as I had imagined. Instead, a multiple-case study design implies 'replication logic' to different cases (similar to testing a hypothesis to different experiments of a positivist research design), which was not what I was trying to achieve. I was not trying to replicate logic because the context of each participant was different, complex and multi-layered, and I was trying to deepen my understanding of the context. Baxter and Jack (2008: 550) describe context as the primary determining factor between single-case study and multiple-case study designs. The authors propose that, within a multiple-case study design, each of the cases have a different context. While the statement may be true when referring to the different lived experiences and identities of the seven 'coloured' women, for this research, I stipulated the context of the case study as public higher education (or affiliates of public higher education) during post-apartheid South Africa. The contextual variables were assigned as the roles the participants pursued in public higher education spaces (as teacher education or mathematics education), and the site of public higher education (within a Faculty of Education, a Faculty of Humanities or a Faculty of Mathematical Sciences or a non-government organisation).

This study is, therefore, a single-case study, that is, a case of 'coloured' women as professional mathematics educators with embedded units (Yin, 2014: 50). The embedded units consisted of seven participating 'coloured' women whose identity constructions were influenced by seven different lived experiences revealed by seven untold 'stories'. Mostly, I had an awareness that the central focus was the backbone to the units of analysis; however, I also wanted to analyse across each of the units to research similarities and differences between lived experiences and identities of the participating women. In order to avoid a pitfall in the embedded design, I continually returned to the central focus of the research.

According to Cresswell (1998: 97), a case is intrinsic if there is a unique and blurred nature of the research. Subsequently, I utilised an intrinsic case study because of the unique and blurred nature of researching the identities of 'coloured' women born during apartheid and who were also constructing their identities during post-apartheid South Africa. This study constitutes the first of its kind in South Africa. It reveals the untold authentic 'stories' of the schooling, the tertiary education and the careers of seven 'coloured' women as professional mathematics educators as they experienced it during apartheid and democratic South Africa. Since the central focus of the study included lived experiences and identities, the narratives of each of the seven participating women became essential for the realisation of the dissertation.

5.3.2 Auto-ethnography

My professional experiences drove this thesis as I navigated my career in professional mathematics education, unable to account for the challenges that I was experiencing in higher education spaces in South Africa – challenges that I had not experienced as a professional mathematics educator in other parts of Africa, and beyond the African shores. In trying to understand my professional challenges, I reflected on my upbringing, the upbringing of my parents and their parents, and so, a personal journey began for me.

Throughout the study, I could not help but self-reflect on my understanding of my experiences during the research. As the research study progressed, an iterative process emerged. During this iterative process, I found that I questioned my self-knowledge of the vulnerabilities and sensitivities of the 'coloured' women as they experienced apartheid and post-apartheid South Africa. I also questioned my lack of knowledge of the apartheid system despite having lived through apartheid; these questions influenced and changed my beliefs of 'coloured' women in the context of my study. I realised that each of our stories was different because we had different lived experiences in the same period. In a sense, as I progressed through the study, I was no longer hearing these women, but feeling them. At some point in the research, my objectivity as a researcher evolved into an intersubjectivity with the participating women that made me rethink my identity, not only as a 'coloured' woman in this study but also as a truthful and a credible researcher (Babbie & Mouton, 2001: 273). A reflexive feel to my research transpired organically, culminating in (or from) personal dialogues. The reflexive essence of my research experience was my voice as the hearer, the interpreter and the messenger of the participants' stories in a particular context at a particular point in time. Inasmuch as I shared the narratives of others, I was also sharing my own 'story' and my voice. Schmid (2019: 266) describes an experience of this nature as autoethnography.

I made a conscious decision that I would be a participant in the study and that I would submerge myself in the research as a reflexive participant (Berger, 2015: 220). Participating in the study was an opportunity for me to be a trusted subject to other 'coloured' women, voicing my untold stories and researching my stories in relation to their stories, and co-constructing our narratives. Therefore, an auto-ethnography evolved to telling my 'story' – to help heal me. According to Berger (2015: 220), in co-constructing narratives and using auto-ethnographic strategies, caution should be taken to "better understand the role of the self in the creation of knowledge" and to "carefully self-monitor the impact of their biases, beliefs, and personal experiences on their research". Participating in the study provided the opportunity for me to get to know the role of the self in co-creating knowledge and also to reveal my biases and lived experiences. Throughout the research process, I self-evaluated my positionality, making notes of my observations within myself and listening to my internal dialogues, conscientising myself of possible power relations between myself and the other research participants in constructing narratives. From Esin, Fathi and Squire's (2013: 207) perspective, power struggles between me as a researcher, as a participant and the other participants required continuous examination to minimise asymmetrical power relations. The notion of power relations was vital to me because I understood that the interviews were not only data collection instruments but, in the context of this study, were also socially and politically infused encounters with the participants (Cohen *et al.*, 2011: 2015). I cannot deny that, at times in this study, I had to reject my role as a researcher of this study and become a researcher of the self in the research process (Chang, 2013) as my 'story' became a process and a product (Ellis, Adams, Tony & Bochner, 2011). As a result, I have included my own story into this research – establishing myself as a research-participant and as a researcher.

5.3.3 Semi-structured interviews

When I began the process of planning interviews as a research method, I drew on the advice of Babbie and Mouton (2001: 289) that "a qualitative interview is essentially a conversation in which the interviewer establishes a particular direction for the conversation and pursues specific topics raised by the respondent". While my research and sub-research questions directed me, I also wanted to create an interview space that allowed the participants to voice what was significant to them in their schooling, tertiary and career phases. In a sense, I wanted to capture the voices of critical incidents raised by the respondents so I could co-construct their narratives around these critical incidents for each of their educational phases.

According to Cresswell (2014), an interview aims to obtain rich, descriptive data to help understand the participants' construction of knowledge and social reality. I designed semi-structured questions that were descriptive to reveal their untold narratives. There was an element of the interview

questions that guided the research participants about their educational experiences while, at the same, an element that provided an openness to their responses that provided a freedom to answer. I found the balance in semi-structured questions. The interview questions were sent to the participants beforehand, giving them sufficient time to ponder and reflect on their lived experiences. The construction of the qualitative interview questions was based on the sub-research questions, which allowed for a rich, detailed narrative for thematic analysis. While I had planned for at least two interviews per interviewee, the reality was that each of the research participants preferred to have both parts to the interviews in one meeting, primarily due to work-related time constraints. Following the interviews, I contacted the interviewees if I required clarity on their responses to the interview questions. The openness of the semi-structured interview approach also meant that the interviewees felt free to share deeply personal experiences and accounts, which did not necessarily have a direct bearing on the focus of this study. As such, I decided to omit these details from the data analysis and discussion.

5.3.4 Intentions of interview questions

There were two main sections in the interview questioning process intended to reveal the untold stories of seven 'coloured' women as they journeyed their professional lives into higher education (see Annexure 3 for the interview schedule). In the first set of questions, I encapsulated the lived experiences of the participants in their primary and secondary schooling during apartheid and the key people who influenced their schooling. Threaded in their untold stories, I wanted the women to disclose their lived experiences of race in school settings and beyond the walls of the schools, as they had experienced the classification of 'coloured' and the impact it had on their lives.

In the second set of questions, I intended to journey with them in their career dreams, how it came about that they pursued careers in mathematics teaching and their choices to further their careers in mathematics education at a time when there was a limited pathway for women to pursue careers in higher education. I wanted the women to share their contributions to mathematics education and to give insights into their role models within higher education spaces. I was also interested whether the classification of 'coloured' impacted their working lives in a democratic South Africa and to give examples of the highlights and challenges in pursuing roles as professional mathematics educators in higher education. A third section requested biographical information.

Initially, I had considered including a focus group discussion. However, because of the concerns raised by the SU Ethics Committee, regarding the confidentiality of the participants, I decided to exclude this approach.

5.3.5 Experiencing the interview process

The interviews of the seven participating women took place over four months from mid-May 2019 to mid-September 2019 (see Annexure 2 for the interview consent form for research participants). Each interview averaged two hours. The interviews were thought-provoking as each interview made me learn something new about myself, not only as a researcher but also on a personal level. On the one hand, I was listening to make sense of their 'stories' as a researcher and, on the other hand, I was hearing 'coloured' women 'de-colonise' their minds and revealing their truths experienced during apartheid and post-apartheid South Africa.

At the time of the interviews, the ages of the seven women ranged from 48 years to 63 years of age. The mean age of the seven women was 57 years of age set within the boundaries of a case study, that is, all the participants were raised and schooled during apartheid before 1990. There was some overlap of tertiary education during the transition from apartheid to post-apartheid in the timeframe of 1990 to 1994. While some of the participating women obtained their post-schooling before and during the transition period, all of the participating women continued to further their tertiary education post-apartheid for one of the following reasons: to either convert a teaching diploma obtained at a teacher training college to a university accredited qualification or to pursue post-graduate studies.

The first interview felt strained, and I was not sure whether the participant had read my previously sent interview questions or whether I was placing strain on the interview process by insisting on asking the questions. I knew that the interview questions were semi-structured, and I, therefore, had the flexibility to use probing questions. By the second interview, I realised that as an interpretive researcher, I had to adapt to the field setting (Schwartz-Shea & Yanow, 2012: 74). By adapting to the field setting, I mean that, since I was trying to steer the interview process, I was also placing strain on the interview process as I kept drawing the interviewees back to the interview questions.

While I understood that the skill of a competent researcher was not to side-track from the purpose of the interviews, I realised that a competent interpretive researcher meant that I needed to surrender to the interview process. In a sense, I needed to allow the interviewees to tell their 'stories' because their 'stories' were untold, were unknown and were, therefore, unpredictable. I realised that my initial rigidity, which I had accounted to my inexperience as an interviewer, was the initial self-creation of a 'laboratory' environment for the interview meetings, rubbing against the grain of an interpretive research paradigm. Therefore, from the second interview, I chose to *hear* what the participants were saying and to probe *their* thoughts on *their* 'stories', not merely to probe the participants to answer *my* interview questions.

By the time I completed the interviews of each participant, I felt confident that I had 'stories' of seven diversified 'coloured' women as professional mathematics educators in higher education. I cannot deny that the 'stories' taught me more about the history of South Africa than during my primary and secondary schooling years. While their 'stories' revealed the weighted burden of apartheid, each of the seven participating women was remarkably grateful to be allowed to share their 'stories' in this research study.

5.4 RESEARCH CONTEXT

This research study draws on two primary contexts in order to capture the lived experiences of the seven women, namely, the geopolitical and the socioeconomic contexts of the disparate spheres of schooling and higher education in the Western Cape, where each of the women pursued their post-schooling studies.[12]

5.4.1 Geopolitical and socioeconomic contexts

Bickford-Smith (2001: 21) brings to the attention that long before 1948, "richer whites had been buying houses built on big plots in suburbs like Kenilworth, Claremont and Rondebosch" and in areas such as Milnerton, Oranjezicht and Camps Bay; title deeds had clauses to keep non-whites out of these areas. In essence, it was impossible for a non-white person to purchase a property in these areas. Bickford-Smith (2001: 21) notes that there were pockets of areas, amongst wealthy whites, where families lived that were neither wealthy nor white, such as in Harfield Village in Claremont. Two of the participants in this study had families living in Harfield Village. Further away from the mountainous and leafy areas, municipal authorities were losing control of the influx of people to Cape Town, and informal settlements, labelled as 'slum' areas, were on the rise in less the less-developed areas of Cape Town. Most of the 'slum' areas were managed by divisional councils who did not have the person-power to 'police' the areas. The Slums Act of 1934 empowered municipalities to redevelop 'slum' areas (Bickford-Smith, 2001: 21), which were then used as motivation to relocate residents elsewhere.

Horrell (1956: 73), who writes about the effects of the Group Areas Act of 1950, notes that in some residential areas in Cape Town, people were living alongside each other in what she describes as

[12] There are currently nine provinces in democratic South Africa - Western Cape, Northern Cape, Eastern Cape, Free State, Kwazulu-Natal, North West, Gauteng, Mpumalanga and Limpopo. There were four provinces during apartheid – Cape of Good Hope (commonly called the Cape), Orange Free State, Transvaal and Natal. The Cape joined the other three provinces in 1910 after the establishment of the Union of South Africa (Bickford-Smith, 2001:19).

racially mixed areas.[13] For example, some of the participants in this study, together with their families, lived in diversified residential areas such as Lansdowne, Claremont, *(Tiervlei)* Tiger Valley and Parow as apartheid was legislated. The effect of apartheid legislation meant that certain areas were clustered together so that residential areas could mirror the four racial classifications of white, 'coloured', black and Indian.

Horrell (1966: 6) adds that the Group Areas Amendment Act of 1965 culminated in the establishment of a national Department of Community Development to "assist disqualified persons (i.e. those belonging to a racial group other than the race for which the group area is declared) to dispose of their properties" and for its board members to "develop new townships for displaced groups". This particular department also had the power to clear 'slum' areas for urban renewal, which they exercised, this time, with the assistance of the South African police force. It is in the light of the implementation of the Group Areas Amendment Act of 1965 that the homes of the parents of the participants in this study were at risk of forced removals in the Cape Town area, an area where municipalities had been hesitant to implement group areas in the past. As will be shown next in this chapter, family homes of the participants in this study, were relocated to the Cape Flats townships of Lotus River, Retreat and Athlone dictated, by law to a branding of 'coloured'.

5.4.2 'Coloured' schools

The clustering of residential areas by racial classification meant that schooling was segregated and, like the seven participating women in this study, primary and secondary schooling was administered and restricted by a Department of Coloured Affairs under the Coloured Persons Education Act No. 47 of 1963 (Republic of South Africa, 1963). School for 'coloured' learners was usually surrounded by purpose-built council flats and homes (government-funded) allocated to 'coloureds' who had been relocated to these areas, assigned to them by the apartheid government – availing council accommodation was a way to implement racial segregation by restricting people to specific areas. While many of the townships were newly-formed, such as Retreat and Lotus River, and on the fringes of the city, within a few years these areas became densely-populated working-class slum areas, which bred crime. No to little investment was made in the upkeep of the townships – there were no recreational opportunities for youth, there were no libraries, and there were no access to mental, sexual and emotional health facilities. In some areas, a playground was built on partly cemented gravel for young children to play. Roads were not tarred, there were no pavements and no

[13] By racially mixed, I mean people living alongside each other who were classified differently as either while, 'coloured', black and Indian by apartheid legislation.

street lights. In 'coloured' areas, such as Athlone and Ravensmead, where 'coloured' people were already living, with no to little investment, poverty and crime bred. There were a few middle-class areas that accommodated 'coloured' families who could afford to rent or purchase homes, such as Lansdowne and Heathfield. In working-class 'coloured' communities, schools were a haven to many children, providing safer spaces for children to engage with their peers. There were some church schools, but most were state schools. State schools were poorly maintained with broken windows, unlocked doors, and ill-functioning laboratories with broken equipment and outdated chemicals. Middle-class schools offered after-school clubs and had functioning laboratories. Learners in rural areas had to relocate as there were few secondary schools outside of the cities.

As will become evident in Chapter 6, the experience of a racially segregated system could not be separated from the politically charged atmosphere in the country from the mid-1970s to the late-1980s. Schooling and politics were entwined in a mesh of resistance from teacher-intellectuals, learners and the public. Privy to this timeframe was each of the seven women in this study who attended secondary schools that protested against the racial segregation of the education system.

5.4.3 Public higher education

According to Bunting (1969), university apartheid was somewhat exclusive to whites in South Africa, mainly controlled by language; Afrikaans-medium universities only enrolled white students and English-medium mainly admitted white learners with some leeway given to non-white learners. In 1968, however, the Universities Amendment Bill (Republic of South Africa, 1968), that authorised the Minister of National Education to exercise a racialised quota of students at universities and, if undermined, lose government subsidies granted to (mainly English -medium) universities.

During apartheid, there were three public universities in the Western Cape province, one correspondence university and two public technikons which I have categorised into advantaged (mainly for white students) and disadvantaged HEIs (the vast majority of non-white students):

Advantaged HEI

- An Afrikaans-medium university restricted admission to whites (Stellenbosch University).
- An English-medium university favoured white students with a minimum government quota for non-white students (University of Cape Town).
- The Cape Technikon served white students until 1987 when the apartheid government removed racialised quotas. This technikon began to offer degree programmes as an extension to diplomas from 1976.

Disadvantaged HEI

- An English- and Afrikaans-medium university (initially in Afrikaans) accommodated 'coloured' students (University of the Western Cape).
- The Peninsula Technikon served 'coloured' students up until 1987. The Peninsula Technikon is significant to this study because the relocation of its site from Cape Town to Bellville in 1967 opened opportunities for 'coloured' students living in the neighbouring Bellville area to pursue higher education, particularly for those who did not qualify or could not afford to study at UWC. The Peninsula Technikon did not offer degree programmes during apartheid.
- A correspondence-only non-racialised university (University of South Africa)

As discussed in Section 3.4.3, by the late 1980s, the Department of Coloured Affairs administered sixteen teacher training colleges in South Africa as alternatives to universities. Of the sixteen, there were fourteen located in the Western Cape (Council on Higher Education, 2010: 8).

Table 5.1 shows the participants' attendance in higher education institutions (HEIs) during apartheid.

Table 5.1: Higher education of participants during apartheid and post-apartheid South Africa

	Apartheid		Democracy
	Pre-1990	**1990 – 1994 Transition**	**Post-1994 Post-apartheid**
Teacher training college of education	4		
University	2	1	6
Technikon	0		1
Total	6	1	7

In Table 5.1, other than the participant who studied at a disadvantaged HEI during the transition period to a democratic South Africa; four of the remaining participants obtained qualifications at disadvantaged teacher training colleges, one at an advantaged HEI and another at a correspondence university. During post-apartheid South Africa, results show that six of the seven participants continued their higher education studies at universities. The remaining participant furthered her higher education at a technikon to complete her qualification. During the 1990s, degree programmes began to be offered at the Peninsula Technikon, and from 2001 the technikon had amalgamated with teacher training colleges. Four participants completed all of their higher

education qualifications in the Western Cape province of South Africa, one participant in the Eastern Cape province of South Africa and the remaining two participants at universities in England in the United Kingdom. Other than the completion of this full-time PhD study, all the remaining participants studied part-time during post-apartheid.

5.4.4 Teacher training colleges as alternatives to universities

One of the career paths that the apartheid government advocated for 'coloureds', was teaching, made possible by the provision of a state bursary. In return, recipients of the bursaries were expected to teach in a primary or a secondary school. Teacher training colleges for promising teachers fulfilled dual purposes: training-colleges that were centres for aspiring teachers who had completed standard 10 (grade 12 equivalent); and training-schools which accommodated aspiring teachers who had completed standard 8 (grade 10 equivalent) creating a two-tiered qualification system within college provision. Therefore, for 'coloured' women (and men), teacher training colleges were (limited) opportunities to post-schooling education. As will be discussed in Chapter 6, four of the seven participants in this study, who registered for post-schooling education, attended Hewitt, Bellville, Zonnebloem and St Augustines teacher training colleges in the Cape. While teacher education at universities focused on secondary school teaching, teacher training colleges focused on mainly primary school teaching (Wolhuter, 2006: 129). In 1996, the National Commission on Higher Education recommended that the teacher training colleges be incorporated into universities (National Commission on Higher Education, 1996: 82), and, in 2001 teacher education became the responsibility of higher education institutions (Ministry of Education, 2001). The incorporation meant that a teaching qualification obtained at a teacher training college required conversion to university accredited qualifications.

5.4.5 Professional mathematics educators in higher education

In Section 5.3.1, I stipulated the context of this case study as public higher education or affiliates of public higher education in post-apartheid South Africa. Following, the seven participants in this study found ways to be employed as professional mathematics educators in public higher education or affiliates of public higher education in post-apartheid in the Western Cape province of South Africa.

In post-apartheid South Africa, the three public universities during apartheid increased to four universities in the Western Cape province:

- The Boland and Mowbray Education Colleges became part of the Cape Technikon in 2001 forming a Faculty of Education with campuses in Wellington and Mowbray. A fourth university was created in 2005 from a merge of the Cape and Peninsula technikons to a

university of technology in the Western Cape province. The university is called the Cape Peninsula University of Technology (CPUT).

- The Mowbray campus of CPUT serves mostly disadvantaged students.
- There is also a regional branch of UNISA situated in the Western Cape in South Africa.

In Section 5.4.1, one contextual variable in this case study was the role of the participants in public higher education spaces. The roles of the seven participating women were either in teacher education or mathematics education at primary, secondary or tertiary level. At the time of the interviews for this study, the employment status of the participants was as shown in Table 5.2.

Table 5.2: Employment status of participants

Employment status	Historically-advantaged	Historically-disadvantaged
Permanent	2	1
Contract		2
Casual		2

Table 5.2 shows that three permanently employed participants were employed at historically-advantaged university campuses and at a non-government institution that had affiliations to a historically-disadvantaged university. One-year contract employment was exercised at historically-disadvantaged university campuses for two participants while casual employment was advocated at historically-disadvantaged universities for the remaining two participants.

A second contextual variable in this case study was the site of public higher education. Mathematics education at primary or secondary school level is located within the Faculty of Humanities at UCT and Faculty of Education at SU, UWC, CPUT and the UNISA. Tertiary level mathematics is taught within the Faculty of Science or Faculties of Mathematical Sciences. Non-government organisations' are affiliated to universities by offering qualifications that are accredited by universities.

5.5 SAMPLING PROCESS

The sampling strategy for this dissertation was purposive sampling. Cohen *et al.* (2011: 156) described purposive sampling as a feature of qualitative research that selects a sample for specific cases. The purposive sample in this study was a particular case of 'coloured' women who had "in-

depth knowledge about particular issues" as professional mathematics educators in higher education. I was guided by three of Cohen *et al.*'s (2011: 157) motivations for purposive sampling, namely, to:

- achieve representativeness;
- enable comparisons to be made; and
- focus on specific unique cases.

The participants consisted of a small-scale non-probability sample of seven women, racially classified as 'coloured' during apartheid. The participating women worked as professional mathematics educators in higher education institutions post-1994. There is an understanding that the sample is not a representation of a broader population of professional mathematics educators in higher education. As the need arose, I also used snowball sampling by asking the seven women to recommend others, at their discretion, that I could approach (Cohen *et al.*, 2011: 158). I did this with the intention that if any of the original participants withdrew from the study, I would know whom to approach. In no way did I inform the original seven women whether I had followed up on their suggested names of women.

5.5.1 Inviting the participants

After my research proposal was accepted and my ethical clearance application approved, I sent confidential emails to eight women in May 2019 asking if they would be interested or knew anyone that would be interested in participating in this study. In addition to sharing the rationale and objectives of my research, I clarified criteria for likely participants as female, over 40 years old (to ensure that they were schooled and had at least two years of tertiary education during apartheid), classified as 'coloured' during apartheid and having worked in professional mathematics education in higher education in post-apartheid South Africa. I made explicit that a classification of 'coloured' during apartheid did not imply that the participants identified with the label of 'coloured' during apartheid and in post-apartheid South Africa. I assured the women that the study was not intended to discriminate against them. I was conscious that a label of 'coloured' in the email necessitated caution, sensitivity and an acknowledgement of personal respect towards the women. I shared with the women that while I would be the principal researcher, my intention was also to be a participant in the study. Participating in the study was important to me to demonstrate solidarity with the women. In other words, being a subject meant that the research was not done to them (other participants), but the research was constructed by us (including myself) about our lived experiences and identities.

Some of the women opted not to participate because of time constraints, and instead referred to other possible participants in their professional networks. In the end, I approached a total of seventeen 'coloured' female professional mathematics educators in higher education to participate in the study. Of the seventeen, sixteen responded, with three indicating that they did not consider themselves suitable for the study. The first of the three respondents stated that she did not consider herself as employed in higher education. The second respondent stated that she no longer worked in mathematics education but community education. The last of the three respondents may not have considered herself as meeting the criterium of a 'coloured' classification during apartheid[14]. Another three respondents felt they had new or additional responsibilities in their workplaces, which posed time and travel constraints and, subsequently, could not participate in the study – one of which lived in the North West province and the other in the Gauteng province of South Africa. Collectively, each of the six respondents acknowledged the importance of the study. Altogether, ten respondents agreed to participate in the study.

As I prepared to meet with the ten remaining respondents one month after my initial email communication, two women did not respond to my request to meet with them. Another respondent withdrew as a consequence of a derogatory study of 'coloured' women by a research team at Stellenbosch University.[15] Consequently, there were seven respondents whom I met with to answer questions about the study, and for their written consent to participate in the study. Of these seven participants, one withdrew after the interview process and before data analysis as she did not want to be characterised by a label of 'coloured' (during apartheid or in a democracy); she considered herself as part of a black majority of the country.[16] Subsequently, this study reports on the lived experiences of seven 'coloured' women, including myself.

5.5.2 Withdrawing from the study

It is not common for researchers to explain why participants opt not to participate in a study. However, I have decided to include some insights into the withdrawal of certain participants because it serves to highlight the contested nature and adoption of a 'coloured' identity.

---

[14] Explained in Section 5.6.2

[15] Explained in Section 5.6.2

[16] Explained in Section 5.6.2

5.5.2.1 First respondent to 'withdraw' from the study

Before I decided to pursue this study, I reached out to mathematics educators in my professional network whom I felt I could trust to talk about my ideas for a possible study. My idea of pursuing a study of this nature was well received. One professional mathematics educator, in particular, openly shared her experiences of institutional injustices. After the ethics committee of the university approved the study, I contacted her as a likely participant. Her responses were, at times, ambiguous and, at other times, vague so I continued to pursue her as a possible participant. I realised later that while she had relayed her disassociation with a label of 'coloured' in post-apartheid South Africa, I had assumed that she had been classified as 'coloured' during apartheid.

My assumption of a classification of 'coloured' in apartheid gnawed at my insecurities and resistance to essentialising race. She did not confirm or reject her classification of 'coloured' during apartheid. However, I sensed an unsettled pain from her side and awkwardness that pervaded in our conversations that followed. In the end, I stopped pursuing her participation. Her lack of participation made me question how I had come to believe that she had been 'coloured' by classification in the first place. I concluded that my internalised racial compass had come to the fore by questioning the whereabouts of her upbringing, looking for clues in her accent and associating her responses, unconsciously, to a racial classification of 'coloured', a racial essentialism that I was not comfortable with. I realised that I *had* been confused about her phenotypes and her accent and my confusion *had* led to an assumption of her racial classification. Each time, when I was questioned about my inclusion of 'coloured' in my study, I responded that it was necessary to rupture the label. I realised that, at the same time, I was also beginning to rupture a part of my associations of accents and phenotypes to the label of 'coloured'. My almost automatic racialised association when I encounter someone remains a challenge to me as I attentively and intentionally encounter a new person with an 'objective' mind – I assume that I know nothing of a person I meet; therefore I need to begin from a stance of showing an interest and being inquisitive of the new person.

5.5.2.2 Second respondent to withdraw from the study

Following a controversial study by Nieuwoudt, Dickie, Coetsee, Engelbrecht & Terblanche (2019) of 'coloured' women, subsequently retracted, a second professional mathematics educator declined from participating in my study. Jansen (2019) critiqued the article for its racial essentialism – his critique of the article highlighted how unconscious we can be in the assumptions we make of people. I also considered that, perhaps, the professional mathematics educator's reason to withdraw from my study was because of the Nieuwoudt *et al*.'s association with the university as, historically,

this university had sowed the seeds of apartheid. Either way, the derogatory study of 'coloured' women sealed the second respondent's withdrawal from my study.

5.5.2.3 Third respondent to withdraw from the study

A third professional mathematics educator was uncertain of her participation in the study from the outset of the research. I appreciated her questions about the research study as it made me think carefully about how I should articulate my thoughts and aspirations for the study. Her main concern was an identity that she believed was associated with a categorisation of 'coloured' in my study. She felt that because the apartheid system had classified her in this particular way, it did not mean that she embraced the classification during apartheid. She felt that one could not have a 'coloured' identity as, for her, 'coloured' was a construct to divide black people. She argued that the apartheid project was set out to separate black and white people, as well as to stratify black people further. From her perspective, I was essentialising race of which she did not want to be part. While I agree that the apartheid project set out to separate people, I also believe that the racist marker of 'coloured' had a profound impact on lives, decisions, self-image and self-worth, which continue to haunt people in post-apartheid South Africa and, therefore, required further theorisation. Unlike the other two respondents, this third professional mathematics educator withdrew after participating in the interview process.

5.6 RESEARCH PARTICIPANTS

5.6.1 Meeting the research participants

Except for using my own name as a participant in the study, I used pseudonyms for the anonymity of the remaining six participating women:

5.6.1.1 Anoushka

I encountered Anoushka for the first time when she worked for a national government institution that had a social responsibility to help raise the profile of mathematics with learners in secondary schools. One of the intentions of the national institution was to encourage learners to pursue mathematics in higher education. Across the school and university spaces, Anoushka's networks spanned non-government and other government projects liaising with education departments and higher education institutions. Ten years into the national programme, Anoushka resigned and reached out to her network for career opportunities. By the time this research study began, Anoushka was working for a historically advantaged university in the Western Cape. In this capacity, Anoushka and I were working as facilitators for the same university project. I discussed my intended study with Anoushka. She was keen to be part of the research and felt that it was high

time that a study of this nature was done. I formalised our conversation by following it up with an email and included the interview questions for her perusal.

By the time we had the interview, I had a good working relationship with Anoushka that began to evolve into a friendship. Having reached out to her to participate in this study and share with her my lived experiences, Anoushka had, in turn, reached out to me on a personal level. In other words, asking Anoushka to participate in this study and sharing my stories with her was a turning point in our professional relationship. I pursued our personal relations as I realised that the narratives that she would disclose to me were *her* stories on a personal journey. I needed to create and retain a safe space for her disclosure and to honour her journey. At that particular moment, I realised that what I was asking of the participating women was to reflect critically, creating a privileged window of opportunity into their private and professional lives, which I needed to respect and cherish.

Anoushka and I agreed to meet in a neutral space. She informed me that she had reflected on the interview questions. However, as the interview proceeded, Anoushka realised that, as I was asking the interview questions, she had not thought about the questions in much depth. Throughout the interview process, Anoushka paused for long periods to reflect on her past. She mentioned that the interview revealed aspects that she had not thought about before with responses like “I don’t know”. Often, Anoushka, a well-articulated woman, was unable to complete her sentences. A few days after the interview, she contacted me to say “Jy laat vir my diep dink*”* (*You made me think in a manner I had not done before*). Throughout the interview, I got a sense that by sharing her personal stories, she was, at the same time, making sense of her life.

5.6.1.2 Bernita

I had never met Bernita within the mathematics higher education space when an ex-colleague recommended her. An ex-colleague contacted Bernita to request permission for me to contact her by telephone. Bernita agreed, and I shared with her on the phone the background and purpose of my study. Without hesitation, Bernita agreed to be part of the study. I followed up on the telephone call with an email containing further details of the study and the interview questions. Bernita responded positively, and we agreed on a date for the interview.

As the second participant interviewed, I allowed Bernita to choose a venue for the interview. She chose her home. I was slightly nervous about our first meeting because I was entering her personal space. Though I was slightly intimidated by her serious persona, after sharing with her that I met her sister twenty-five years before, Bernita made me feel welcome and comfortable. It was clear that Bernita had read the interview questions beforehand as she knew the questions that would follow next. She was forthright and honest in the manner in which she answered the interview

questions. She clarified that she preferred to live in a 'binary' world. For Bernita, there was good and bad, right and wrong, black and white with no room for in-between. She articulated that she never pondered on a decision that needed to be made. According to Bernita, a decision was cerebral, not emotional. She admitted that this binary view had perhaps changed as she matured. Bernita did not view her role as a mathematics educator or as part of the social sciences. She considered social sciences to be too subjective. In her view, teaching mathematics meant being part of an objective world.

5.6.1.3 Carmen

Carmen was the third professional mathematics educator that I interviewed. I knew Carmen, professionally, through previous professional encounters when partnerships were sought amongst universities and non-government institutions. She had also participated in a research project that I had previously completed. Carmen agreed to participate in this study soon after receiving my email request. I knew that Carmen was forthright and opposed any racial classifications by the apartheid regime and, at that stage of the study, I continued to be nervous about the use of the label of 'coloured'. Carmen was politically savvy and experienced, so I expressed my uneasiness of portraying the study as promoting racial essentialism. Carmen assured me that the way she had read my purpose statement and research intentions was not to promote 'coloured' or associate 'coloured' to particular traits. Nor, she articulated, was I attempting to associate a particular identity with 'coloured'. In a sense, Carmen had the insight to understand what I was trying to achieve during an uneasy time for me when I felt that I lacked the political insight and scholarly knowledge of race as a concept and the meaning of 'coloured' in the South African and in the Western context.

Carmen and I agreed on a neutral location for the interview. Throughout the interview process, Carmen remained poised, clear and politically knowledgeable. Carmen's interview revealed a mountain of political knowledge and political activities that I was unaware of during apartheid. Her ability to articulate a history of South Africa that was unknown to me caused an emotional stir within me that changed a part of me. My fear and my shame towards my, perhaps, internalised racial essentialism evolved into the beginning of an understanding of how race was used to create a stratified and fragmented South African population. Carmen's interview had ruptured who I thought I was and; therefore, ruptured a part of my identity.

5.6.1.4 Danah

Danah was the fourth participant that I interviewed for the study. Like Anoushka and Carmen, I encountered Danah while she worked within teacher education. Initially, I was hesitant to request her participation in the study because I was unsure if she worked within higher education. Since her

organisation's main focus was to work with teachers to improve the quality of teaching and learning, and teacher education sat within higher education, I chose to invite Danah as a participant. Furthermore, her organisation was supporting universities who were unable to meet the demands of in-service teacher training, and she had the permission of a provincial education department.

Danah took a while to respond to my email request, which she accounted to her busy schedule as the director of a non-government organisation. Unlike the other participants in this study, Danah worked within the professional mathematics and professional science higher education spaces. Our paths had crossed professionally in the past during mathematics projects but, beyond her role as director, I did not know her personal life. It was only during the interview process that Danah shared accounts of her personal experiences, and I got to know her on a deeper level.

Danah proposed her organisation's office as a suitable venue for us to meet. She acknowledged that she did not have the time to reflect on the interview questions due to her busy work schedule. Danah came across as a deeply private person underneath her confident nature. At the time of the interview, I had a sense that Danah had built a protective wall around herself to camouflage her vulnerabilities throughout her life. Throughout the interview, she was calm, poised and her words pierced me as she revealed her negative experiences as a 'tall, dark and handsome' young woman in her community. Like Carmen, Danah's interview responses revealed a knowledge-base of South African politics that I was unaware of that had a significant impact on the lives of her family.

5.6.1.5 Aisha

I did not know Aisha before the study. One of the respondents suggested that I email Aisha, which I did to request her participation. She did not respond immediately, so I followed up on my email, upon which she responded by asking whether the study was going ahead after the critique of Nieuwoudt *et al*.'s (2019) study of 'coloured' women. I responded that the study she was referring to was not my study, and requested to discuss any further questions she had in person. I suggested that we meet at a venue of her choice. At our first meeting, we agreed that we would get to know each other's professional lives and challenges before we began an interview. In a sense, she was 'testing the waters' as a likely participant for the study. I started by sharing my experiences and challenges and was followed by Aisha. Aisha shared that she always felt that she had a story to tell about her life and for her, perhaps, my study was an opportunity to do so. She agreed to participate in the study.

Aisha invited me to her home for the interview. Similarly to Danah, Aisha acknowledged that she had not had the time in her busy schedule to look at the interview questions in detail. Aisha shared detailed personal accounts of her life. At this point in the study, I realised that the women were not

only sharing personal accounts of their lives but also confidential painful memories of their lives. During the interview, I listened attentively but found it increasingly difficult to stick to the 'script'. My interview with Danah matured me as an interpretive researcher – to 'loosen up' and become part of the research process and less driven by the completion of a thesis. I noticed that as I was listening to the stories of the participants, my emotional pain had settled compared to the start of the study as I began to witness how intertwined our personal and professional identities are to our socialisation. Aisha and I remained in contact after the interview.

5.6.1.6 Esmerelda

I got to know Esmerelda while sharing a common higher education space when we worked together in the same project at a university. My introduction to Esmerelda occurred over lunch with a group of professional mathematics educators. We began to discuss some of our challenges as women and mothers, of which most of us at the table were unaware. The personal challenges appeared common among us. One of the women whom I had spoken to about my study interest, asked me to share my proposed study with the group, which I did. Each of the women found the study interesting, particularly Esmerelda. I decided to speak with her about my study in more detail after the ethics committee of Stellenbosch University approved my study.

Despite Esmerelda showing an interest in the study, it was difficult to set up a meeting. She had a busy work schedule; therefore, each time we set up an appointment, she was unable to meet. Esmerelda experienced the loss of a loved one earlier in 2019, so my intention was not to aggravate her pain during a difficult period in her life. I decided to delay writing to her; further request for her participation would be my last resort. When I eventually wrote to Esmerelda, she thanked me for my patience during her grieving period, and apologised and confessed that she was unsure of meeting with me because she didn't feel that anyone would be interested in her life story. I assured her that her life story was worth telling. Esmerelda preferred to meet with me at my house for the interview. She was the last participant that I interviewed. Throughout the interview, I could tell that she enjoyed conveying her story to the extent that she thanked me for the interview, affirming that she felt privileged to be part of the study. Esmerelda and I continue to share common working spaces in teacher education.

5.6.2 Biographical information of the research participants

At the time of the interviews, the ages of the seven women ranged from 48 years to 63 years of age. The mean age of the seven women was 57 years, set within the boundaries of a case study, that is, all the participants were raised and schooled during apartheid before 1990. There was some overlap of tertiary education during the transition from apartheid to post-apartheid in the timeframe of 1990

to 1994. While some of the participating women obtained their post-schooling before and during the transition period, all of the participating women continued with further tertiary education post-apartheid for one of the following reasons: to either convert a teaching diploma obtained at a teacher training college to a university accredited qualification or to pursue postgraduate studies.

5.6.2.1 Anoushka

Anoushka is 53 years of age. She completed her primary schooling in Athlone and her secondary schooling in Elsie's River. Both schools are located on the Cape Flats in areas that were historically assigned to 'coloured' people in the Western Cape province. She completed her first three years of her diploma at a teacher training college in the Western Cape province. At the time, a teaching diploma was one of the limited professional occupations that 'coloured' women could pursue in South Africa. In 1994, ten years after leaving college, and at the start of South Africa's democracy, Anoushka completed her fourth and final year of her diploma in mathematics and physical education. In 2012, she obtained a Bachelor of Arts Honours degree.

Anoushka has a total of thirty years experience working initially as a primary school teacher then as a secondary school teacher, followed by various support roles for the enhancement of the mathematics curriculum for the Western Cape Education Department (WCED). Following her employment as a teacher, she began her work for the national government institution. Her passion has always been sporting activities, mathematics, and supporting disadvantaged young adults in community projects. She is an all-rounder, always seeking opportunities to engage in projects with higher education institutions and disadvantaged communities. She has experience of working in historically-advantaged and historically-disadvantaged universities. At the time of the interview, Anoushka worked on a contract basis for a historically-advantaged university. She was in the process of seeking opportunities in other higher education institutions. Anoushka is married with children.

5.6.2.2 Bernita

Bernita is 52 years of age. She completed both her primary and secondary schooling in Ravensmead on the Cape Flats. Her Bachelor of Science and Honours degrees in mathematics were completed in 1987 and 1989 at a historically-advantaged university. She completed her Master of Science degree in mathematics in 2014.

Unlike the other participating women in this study, Bernita spent her entire career of twenty-five years teaching post-school mathematics at a technikon and then at a university of technology (following the amalgamation of technikons in 2002). At the time of the interview, Bernita had agreed a new role at a distance learning university which she was looking forward to as her new

role allowed her the opportunity to develop a "much-needed" mathematics curriculum. Her first love is animals; therefore, one of her life regrets is that she was unable to pursue her dream of becoming a veterinary surgeon as this career was not permitted for study by 'coloured' people during apartheid. The historically-advantaged university that offered veterinary studies is situated in the province of Gauteng, approximately one thousand four hundred kilometres from her home town. Bernita is married with children.

5.6.2.3 Carmen

Carmen is 62 years of age. Carmen completed her schooling in Wynberg and Claremont, both relatively affluent suburbs in Cape Town in the Western Cape province. She started her career as a secondary school teacher in Grassy Park on the Cape Flats, which culminated into eighteen years of teaching. Her career evolved into teaching in-service teachers at a historically-advantaged university for sixteen years in the Western Cape.

Carmen holds a range of university qualifications from varying institutions. She has a Bachelor of Arts, a Bachelor of Education, a Master in Education and has two diplomas in education. While pursuing a doctoral degree, she opted not to complete her study. She obtained her first qualification in 1984 during a period of political turmoil for the apartheid government and completed her Master qualification in 2016. She continues to be passionate about the teaching and learning of mathematics in the same way that she has always been an activist for non-racialism. At the time of the interview, Carmen was moving into her retirement. She intended to pursue her passion for mathematics education in higher education. She is married with children.

5.6.2.4 Danah

Danah is 56 years old and is the only participating woman who holds a doctorate, awarded to her in 2015 at a historically-advantaged university in the Western Cape Province. Danah completed her primary and secondary schooling in Grassy Park on the Cape Flats. She completed a diploma at a teacher training college on the outskirts of Cape Town. Her first passion includes science, then the teaching and learning of mathematics as the language of science. Therefore, her twenty-three years of teaching at a primary school pendulated between teaching the two subjects.

Her second passion is to provide curriculum access to mathematics and science teachers for disadvantaged primary school learners. Subsequently, she leads teacher education programmes that enrich the mathematics and science curriculum for primary school teachers in the Western Cape. Currently, Danah is a director of a non-government organisation that serves universities in the Western Cape, the WCED and any teachers who wish to further their professional learning in mathematics and science. Danah is a single mother with children and a confessed political activist

for education. Her motto is that since she was able to thrive academically by attending a 'struggle' school (a politically active school during apartheid), she expected her children also to attend 'struggle' schools in post-apartheid South Africa.

5.6.2.5 Aisha

Aisha is 62 years of age. She completed her schooling in 'coloured' areas on the outskirts of Mossel Bay and Strand, both predominantly white Afrikaner towns. After two years at a teacher training college in Cape Town, her career started as a primary school teacher. Aisha pursued primary school teaching for twenty-three years, followed by eighteen years as a professional mathematics educator.

Throughout Aisha's career, she continued to be a student. While teaching, she continued to further her studies. Learning is her passion; therefore, she took every opportunity to continue her studies as a lifelong learner; at two teacher training colleges and a historically-advantaged university in the Western Cape province to complete a secondary schooling certificate, a certificate and a diploma in education, a Bachelor in Education and an Honours in Education degree. She completed a Master in Education in 2012 at a historically-advantaged university in the Eastern Cape province. She is currently a mathematics education lecturer at a university of technology in the Western Cape province. While the university of technology mainly serves historically disadvantaged students, Aisha is based on the campus site that serves mainly white students. Aisha is a single mother with one child. She was and remains a sporting enthusiast.

5.6.2.6 Esmerelda

Esmerelda is 63 years of age and the oldest of all the participating women. Unlike the other participating women who completed their schooling in the Western Cape province, Esmerelda completed her primary schooling in Nababeep, a small rural town in the Northern Cape province. She pursued her secondary schooling in Ravensmead, in the same suburb as Bernita's schooling. Esmerelda's parents had the idea that Bernita could live with her relatives in Ravensmead while being completing her secondary education in the area; hence her enrolment in Ravensmead.

Esmerelda holds a Bachelor of Arts degree and a Bachelor of Education degree. She completed her studies at various institutions starting at teacher training colleges during apartheid. During post-apartheid South Africa she studied through a national distance learning university and then at a historically-disadvantaged university in the Western Cape. At the time of the interview, Esmerelda's husband had recently passed away; she currently lives with her son. Esmerelda had also resigned in her longstanding role in a senior position at the WCED but continued her ongoing researcher role at a historically-disadvantaged university in the Western Cape province. She also

coordinates and facilitates a primary school mathematics education qualification course at a historically-advantaged university in the Western Cape province.

5.6.2.7 Sinobia

I am the youngest of the participating women at 48 years of age. I completed part of my primary schooling in Parkwood on the Cape Flats followed by a primary school in Lansdowne, a more affluent area. My secondary schooling took place at Groenvlei High School. After I completed my secondary schooling in 1989, I attended the University of the Western Cape from 1990 to 1994, the transition period from apartheid to democracy. From 1990 to 1994, I completed a Bachelor of Science degree and an Honours degree, followed by a teacher's diploma. I taught at a secondary school for three years, after which I furthered my career abroad. I returned to South Africa in 2012 and worked for a non-government organisation, which was affiliated to various national and international tertiary institutions. In 2017, I completed a distance-learning Masters in Education with a university abroad. I am a single mother with one child.

5.7 VALIDITY AND CONFIDENTIALITY

According to Cohen *et al.* (2011), validity in qualitative research includes several principles. The principles of validity that I selected from Cohen *et al.* (2011: 180) for this study were:

- ensuring that the context was bounded and not open-ended for greater meaning within the context of the study;
- the researcher is part of the research and is the primary research tool in obtaining first-hand data from the participants; and
- the data was descriptive to provide a rich focus on processes rather than outcomes.

Bryman (2008: 265) brought to my attention the possibility that the behavioural responses of the research participants may be artificial if they were observed. Relating his view to interviews, I invited the research participants to choose an interview venue with the assumption that they were choosing a space in which they felt comfortable, relaxed and open to being questioned.

In preparation for a skilled interview, I heeded to Kvale's (cited in Cohen *et al.*, 2011: 207, 208) advice by following his suggestions below:

- Have a well-prepared interview;
- Structure the interviews well so that each stage of the interview is clear to the participant;
- Clarify terminology;
- Allow time for the participants to respond to the questions by sending the questions to the participants beforehand;

- Use active listening, be observant of body language and be sensitive to their responses; and
- Recall, clarify, confirm and modify a participant's comments to them.

Johnson (1997: 285) suggested that an 'interpretative validity' is necessary to provide meaning to the stories of the seven participating 'coloured' women concerning the research questions and sub-questions for this study. Therefore, he averred, the researcher requires an accurate as possible understanding of thoughts, feelings and experiences of the participants. With this view, the research participant interviews were transcribed and sent to the interviewees for checking accuracy and correctness. The interviewees were permitted to make changes, after a reflection period of up to one month, to assess whether the transcripts misrepresented their thoughts. Excluding myself as a participant, four out of six interviewees made changes to their transcripts, which helped to provide greater accuracy to their thoughts, feelings and experiences. The remaining interviewees made no changes and were satisfied with their transcripts. While constructing the narratives, I listened to the recorded interviews and read their adjusted transcripts timeously to familiarise myself with an in-depth understanding of their stories.

This study is an example of sensitive, deeply personal educational research; firstly, because of the women's classification as 'coloured' during apartheid and an interview of this classification during a democratic South Africa. Secondly, as the principal researcher, I had to be sensitive about the context within which the 'coloured' women were raised and educated during apartheid, with a primary responsibility not to 'harm' the participants (Babbie & Mouton, 2001: 291). Thirdly, I was requesting that the participating women reflect and share with me their lived experiences and identities with the possibility of revealing a painful past. In this regard, confidentiality and anonymity were imperative. As a researcher, I required a self-consciousness that embraced iteration and reflexivity to make sense and understand the lived experiences of each of the women.

In no way were the participants discriminated against based on their lived experiences, identity, cultural background, religion, qualifications, gender, mother tongue or any background outlined in the ethical research guidelines of Stellenbosch University. Each of the participating women was interviewed separately. All participants were assured of their confidentiality and anonymity in the study: Pseudonyms were used, and names and data were kept separately in a secure environment. A voice recorder captured the interviews, which were then transcribed electronically by the principal researcher.

5.8 ETHICAL CONSIDERATIONS

In November 2018, an application for ethical clearance of my study was made to the Stellenbosch University Research Ethics Committee. Following changes requested by the ethics committee, the following documents were approved in March 2019 (see Annexure 1 for ethics approval letter):

- my research proposal;
- list of semi-structured interview questions; and
- a participant consent form with which I would be inviting participants and requesting the participants to read, complete and sign before being interviewed.

After ethical approval, I proceeded to constitute my research sample. After the research participants had agreed to participate in the study, each participant had to complete a consent form, which I requested them to read, complete and sign before interviewing them. Interviews with research participants were conducted after the consent forms had been discussed, agreed and signed. Emphasis was placed on participants' anonymity, confidentiality and their right to withdraw at any point of the study.

5.9 LIMITATIONS OF THE STUDY

At the time of writing the proposal for this dissertation, I considered a sample of ten participants for this case study. Inasmuch as I thought that ten participants were too few, by the time I interviewed six participants and recorded my narrative, I felt that the seven participants' lived experiences were sufficiently manageable for the study.

It was liberating to hear the voices of each of the participating women. However, it was also problematic as I had to consciously dislodge myself as a researcher from their 'stories' while writing the narratives. Locating myself in the experience of the research participants was necessary to familiarise myself with their interview responses in order to reconstruct their narratives. It was, therefore, challenging to divorce myself from reliving the participants' lived experiences as a researcher in the process.

An important consideration for the participants in the study was the extent to which the participating women revealed their private lives and the sensitive nature of the study – some personal issues were raised during the interviews. While I had member-checked with the participating women, and they agreed to retain the personal issues in the transcript, I chose not to disclose the personal information. In other words, there were times when I used my judgement not to disclose information that I believed might become problematic to the participant in the future.

Perhaps, in this regard, I was the limitation; however, my actions were a means to protect the anonymity and confidentiality of the participants in the future.

5.10 CHAPTER SUMMARY

In this chapter, I described the research paradigms and made explicit the challenges I experienced in deciding on them. I also described the research methods, namely, a single case study, an autoethnography and an interview process. This was followed by an account of the research context that took into account the geopolitical and the socioeconomic contexts of the disparate spheres of schooling and higher education in the Western Cape. I also explained the sampling strategy and the biographical information of each of the participants. The chapter continued with validity, confidentiality, and ethical considerations of deeply personal educational research and concluded with the limitations of this study.

In the next chapter, I present the findings of the data obtained from the seven participants who pursued careers as professional mathematics educators in higher education.

CHAPTER 6:
JOURNEYING UNTOLD STORIES

6.1 INTRODUCTION

This chapter presents the findings of data collected during face-to-face interviews of seven women classified as 'coloured' during apartheid working as professional mathematics educators in higher education in South Africa's democracy. In analysing the data, I have used CRT as a conceptual framework. In this regard, I am especially interested in analysing the way in which a classification of 'coloured' has shaped and influenced the lived experiences of the seven women – both during and after apartheid. One of the potential contributions of this study resides in recognising that the 'coloured' women in this study were "doing the theory" instead of a theory being done to them (Lugones & Spelman, 1983: 573). That is, what they lived and experienced as 'coloured' women have provided particular theoretical insights into what it means to be seen and living as an 'other'.

A reminder to the reader that the main research question for this dissertation is:

> How have the lived experiences and identities of 'coloured' women in South Africa determined and influenced their roles as professional mathematics educators in higher education?

In support of the main research questions, the sub-questions were:

- What were the schooling experiences of women who were classified as 'coloured' during apartheid?
- What were the tertiary education experiences of the women classified as 'coloured'?
- What were the experiences (highlights and challenges) of pursuing a career in mathematics education during post-apartheid South Africa?

The lived experiences and the identities of each of the women in this study could not be explored without an in-depth understanding of the geopolitical and the socioeconomic context within which each of the participants found themselves as school learners, college and university students, and as professional mathematics educators in higher education. The women's interpretations of their context and how they perceived of themselves and their experiences informed a first-level thematic analyses.

Solorzano's (1997: 6) definition of CRT was useful to frame my analyses. A reminder to the reader that he defined CRT as follows:

> *[A] framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyze, and transform those structural and cultural aspects of society that maintain the subordination and marginalization of [p]eople of [c]olor.*

In terms of identifying the structural and cultural aspects of society, I *identified* apartheid, 'coloured', routes into tertiary education, and highlights and challenges in pursuing careers in mathematics education. I began the process of creating themes using keywords from my research questions. First, I wanted to find out if their interpretations of apartheid had similar or different meanings to each of the participants. Second, I was keen to know the participants' perceptions of the label, 'coloured', and how they had been conscientised with this label. Third, I sought clarity on routes into tertiary education and whether there were any driving forces toward a tertiary education. Fourth, I aimed to find the highlights and challenges (professional and personal) in pursuing careers in mathematics education. Using this deductive approach, the initial themes included the following:

- Apartheid as a multiplicity of experiences
- The (un)shaping of 'coloured' in public spaces
- Routes into tertiary education
- Highlights and challenges of pursuing careers in mathematics education

As I began to study the data in greater depth, I *identified* that the displacement of the families of the participants influenced the school choices of each of them. Following, I added an additional theme called "displacement and school choices". While the findings of this theme were interesting and also deeply personal to each participant, I realised later that it did not meet the purpose of this study.

Regarding the *analysis* of the structural and cultural aspects of society, while I familiarised myself with the data under the four main themes, sub-themes emerged, which required reshuffling. Following a second-level analysis, themes for the findings evolved into the following taking on the form of a timeline from childhood to adulthood, and described in detail in Section 7.3:

- Normalisation of racial difference
- Hierarchical racial othering
- Controlling careers
- Impeding potentiality
- Personal and professional challenges

The findings also include reflections of my schooling, tertiary and career experiences and helps to delve deeper into the data. Through the analyses of these themes, CRT aimed to reveal and perhaps

transform aspects of society that continue to disenfranchise, subordinate and marginalise 'coloured' women professional mathematics educators in higher education South Africa.

6.2 NORMALISATION OF RACIALISED DIFFERENCE

6.2.1 Separate recreational spaces

Apartheid legislation limited the movements of all South African citizens and its residents in public spaces. For example, parks, beaches, some retailers and train carriages displayed *"net blankes"* (whites only) and "*nie-blankes"* (non-white) signposts for everyone to abide by segregation laws. Failure to adhere to these segregation laws meant a hefty fine or an arrest.

At a young age, Danah knew that she could not play in certain parts of parks in Cape Town because she was not white. While walking in the park with her siblings, it was difficult for her mother to manage three young children, who saw the green open spaces as opportunities to play together as siblings. Disobeying the law was a fearful experience for Danah, a feeling she sensed from her mother each time one of her siblings disobeyed her when they played in areas of the park allocated to whites. Aisha also had experiences of segregation in parks. Non-whites walked on designated pathways in affluent areas – any divergence from the pathway resulted in the park official chasing her away. Despite her fear of the park official, she enjoyed the walk very much because it was a shorter and a more scenic route to her destination. Carmen recalled that, as children, they were only allowed to play in a small section of the park. "Whites only*"* signposts at public toilets indicated that she could not use the toilets – she knew that she was not white, "[they] were almost, in a way, accepting of the fact that [they] couldn't", and not defiant of the law. Carmen felt safe when she walked about in the neighbourhood park with her friends – the laws of apartheid did not affect her when she was with children her age because she did not understand the implications of the laws.

Recreation for Bernita meant spending time at the ice-rink. Bernita shared her frustration of waiting for white people to finish their turn on the ice before 'coloureds' were permitted their turn. By the time she was allowed to ice-skate, the ice had melted. The restriction of entering the ice-rink when the ice rink officials deemed appropriate, created anger towards white Afrikaners. In order to get back home, she had to walk via a white residential area and so, together with her friends, they would express their anger by kicking tins and stones to deliberately irritate whites, especially white children playing in the street.

6.2.2 Segregated beaches and inconvenient public transport

When Carmen was in public spaces with her mother, her mother's behaviour was defiant of the apartheid regulations. For example, few beaches on the Cape Peninsula coastline were designated

for ‘non-whites’ and access to these beaches was difficult due to limited public transport to them. When Carmen’s mother became frustrated with overcrowded train carriages, she would step into a carriage reserved for ‘whites only’. She felt that she had paid the same price for her ticket as her white counterparts and, since the carriages had empty seats, she could be seated. Other times, her mother would deliberatively defy the law by swimming at ‘whites-only’ beaches often located adjacent to non-white beaches.

My fondest memory of socialising with family was when I was five years old. I recall asking my father why we could not swim at the more beautiful and more prominent beaches; he responded that it was for ‘whites only’. I accepted my father’s answer as truth and; therefore, I never swam at beaches reserved for whites. Our local beach was eight kilometres from our home on the Cape Flats and, as I became older, using public transport was inconvenient. To reach the local beach meant two bus journeys, a train journey followed by walking or hitchhiking to get to a beach for ‘coloureds’. The return journey took most of the day, and it was costly. While the journey was arduous, it was fun because we walked along a beautiful coastline, albeit we were not permitted as ‘non-whites’ to swim at these beaches. I opted to hitchhike to the beach as the distance was much shorter compared to the distance using public transport. The shorter distance was undeveloped and felt deserted. Each time, I felt that I was putting my life at risk, but it did not stop me from going to the beach.

Aisha gave accounts of the presence of lifeguards and calmer undercurrents at beaches reserved for whites. In her town, she was only allowed to swim at “the rocky beaches” where there were no lifeguards, and the tide was usually dangerous. She loved the sea, and often she just wanted to admire the beach, but she knew she “could not set foot on the beach” and was only allowed to walk on the harbour wall. When she took the risk to swim at these beaches, she was always on the lookout for the police. When seen, they were chased by police.

6.2.3 Controlling entry and access to shops

Aisha was in Grade 2 (six years old) when she noticed that whites entered shops through the front entrance while her friends and family entered shops at the back entrance. The different entrances confused her; she began to question differences between herself and those entering the shops at the front entrance. Aisha could not understand why the front entrances of shops were reserved for whites as her skin tone was as fair as their skin tone. Danah, too, had vivid memories of her family not being allowed to eat at restaurants in their local mall, yet her family was permitted to purchase groceries at the same mall – it did not make sense to Danah. Bernita had to cross a river on an unmaintained bridge in order to have access to retail shops. The river served as a boundary between white and 'coloured' residential areas. The retailers were on the side where white Afrikaners lived.

At times, she would fall into the river, which infuriated her. In time, the unmaintained bridge became a symbol of her anger towards white Afrikaners. To Bernita, white Afrikaners living on the other side of the bridge had the benefit of accessing amenities that she did not have at her disposal. From her experience, white Afrikaner meant privileges that were not privy to her.

6.2.4 Disparity between people

Aisha was under five years old, yet when she frequented her mother's workplace – a communal public *washuis* (laundry) where 'coloured' women washed the linen of wealthy people. Her mother referred to her employers as *baas (*boss). From the age of five, Aisha's task was to return the washed linen to *die baas en mies se huis* (the boss and madam's home). Her mother instructed her never to enter the home, leave the ironed laundry at the entrance to the house and return the coins left on the side table to her mother. Aisha knew that *baas en mies* were different to her because of their big house and swimming pool, which Aisha's family did not own.

A memory that stood out for Aisha was buying fruit from the back of a truck of a farmer. After a while, the farmer gave fruit to Aisha for free and, later, he asked if her parents could 'give' Aisha to him. Aisha's understanding was that her light-coloured hair and fair skin tone led him to believe that he could raise her at his farm, without anyone noticing that she was 'coloured'. Aisha's mother refused his request, and Aisha's mother disallowed her to take or purchase fruit. Aisha was disappointed that her mother no longer allowed her to go to the truck.

Aisha spent much of her leisure during the first few years of primary school pursuing her love of sports. Her teachers encouraged her to be a good athlete, which increased her confidence. When Aisha moved to a new town, she could not enrol at the primary school opposite her home because the school was for white learners only. Often, she stood at the fence of the beautiful school and wondered why she could not be a learner at this particular school. She enjoyed watching white learners play a variety of sports. Instead, Aisha's mother enrolled her at a primary school for 'coloured' learners, five kilometres away from her home by foot. However, this primary school was for Muslim learners, and she was expected to know the Arabic alphabet. She described her experience as follows:

> *I was sitting right at the back. There were about thirty children in the class, and then this whole board was … The Muslim alphabet was on the board … Arabic. Then he started asking the children from the front, and they had to recite – each one saying one letter of the alphabet. And, I thought, oh my goodness, what if he comes to me. I don't know these Arabic letters at all. And, I think I am a very proud person and it would have been degrading to me if I had to say something wrong. So, I counted the children, and I counted the letters (on the*

> *board), and I realised that is what I have to say when it gets to me. And, when I answered correctly, he was like startled.*

Aisha's teacher knew that she was not familiar with Arabic and Muslim customs but, he never said anything to her and she did not tell anyone of her lack of knowledge of the religion. She stayed after school to practice her religious studies in the afternoons, as was expected of all the learners in the school until she was in Grade 6. By this time, Aisha's teachers praised her for her commitment to religious studies; however, she realised that she was reciting a language that she did not understand. By the end of Grade 7, against the wishes of her teachers and Muslim (step)father, she stopped reciting religious passages. Despite learning a language and religion she was unfamiliar with, it was an important learning experience for Aisha because here she discovered that rote learning was not beneficial to her.

6.2.5 Stratification within a label of 'coloured'

Bernita was dissatisfied with a classification of 'coloured' as a homogenous group. She was of the view that commonality drew people together. For example, she said, there are "certain way[s] of doing things" in every community. The minstrel carnival in Cape Town (offensively referred to as a 'coon' carnival during apartheid), is an annual event celebrated in parts of 'coloured' communities. Bernita's family did not participate in this celebration. To Bernita, 'coloured' was not based on similar phenotypes of people as there were people from other countries with a similar skin tone to her own and, who did not have a 'coloured' classification. She added that 'coloured' was also not a culture because if a determining factor of 'coloured' was skin tone, a culture could not be determined based on skin tone.

Danah could articulate the exact moment in 1971/1972 when she became aware of race. Danah revealed that it was a family member who told her that she was black and that her cousin was white. At that moment, she came to realise that skin tone had a more significant meaning than a label of 'coloured' but, at her tender age, she did not understand its meaning. She describes the occurrence as follows:

> *[M]y father's brother came from Johannesburg, with his wife and three children. And, his eldest daughter has fair skin and she is white because her mother was a Jewish and she married into a Muslim family and became Muslim. She was classified white. So, here I have my colour (dark) skin and my cousin, who I got very close with, had white skin. We love each other to bits, but the world doesn't see this situation. Do you understand what I mean? It was really confusing growing up with your emotions, your rejection, the abuse ... you*

accepted you're not accepted ... what is right, what is wrong ... how should I be, how should I feel ... gosh. Dit is baie deurmekaar (It is very confusing).

6.3 HIERARCHICAL RACIAL OTHERING

6.3.1 Inequality across racialised schools and classrooms

Like all the participants in this study, Anoushka attended a primary school for 'coloured' learners during apartheid. Her primary school teachers, particularly her sports teachers, were her role models at school. She accounted for her love of sport and her continued passion for participating in sports today to her teachers. At the start of her secondary schooling, in 1979, she competed against white learners at a provincial sporting event for the first time. Here, she noticed differences in material acquisitions between herself and white learners. The white learners had tracksuits, starting blocks and spike trainers; all of which Anoushka and her school peers did not have. Anoushka began to feel financially inferior to whites.

During the latter part of her secondary schooling, she participated in a two-year mathematics programme. Learners were selected from 'coloured' schools to work alongside black learners in neighbouring areas. She recalled visiting the learners' homes that were purpose-built structures made of wood and corrugated iron sheets. The learners' homes consisted of one main room with a table to suffice as a learning space. In some instances, there were no roads to access their homes – Anoushka and her peers had to walk to get there. The experience was a critical moment for Anoushka as, in her words, she stated, "I had no idea people lived like this".

Having visited the homes of impoverished learners, Anoushka realised differences between herself and the learners she was visiting. She felt torn because, on the one hand was the impoverished conditions and the learners' inaccessibility to resources such as textbooks, which upset her very much. On the other hand, her parents feared for their daughter's life as they felt that these areas were too dangerous. When asked why her parents thought it was dangerous, Anoushka responded that her parents were brought up to believe that 'those' areas were unsafe; however, Anoushka never felt afraid in their homes. She was adamant about participating in the two-year mathematics programme. She made detailed notes in her mathematics lessons and shared these notes with her less fortunate counterparts, who appreciated her notes in the absence of mathematics textbooks. Anoushka often wondered why all her classmates had textbooks, and others did not have the same access. In addition, her less-fortunate counterparts also visited her home. The learners were impressed with Anoushka's home environment. Just as Anoushka had never been in a black person's home, they too had never been in a 'coloured' persons home. Towards the end of the two-year programme, Anoushka knew that there were differences between herself and less fortunate

learners. However, she was unable to comprehend why there were differences in resources. Her lack of comprehension, and her parents' concern of engaging with black learners, seeded an idea of differences in people that amounted to differences in race.

When probed whether she accepted a 'coloured' classification during her school years, she responded that "the system told you so". In her words, she stated:

> *You were in a coloured school. You were in a coloured group. At sport, we knew we were the coloured kids. We could see that we were the coloured kids. There are the coloured kids. There are the black kids. By the colour. By your hair. By your eyes. By the physical attributes. Because you were enrolled at a coloured school, you lived in a coloured area.*

While I probed Anoushka, I realised that, prior to our interview, Anoushka had not reflected on the effect that her racial classification had had on her schooling experiences. Her inability to complete sentences, searching for ways to describe her views and her hesitancy to articulate herself led her to exclaim, "It's just there!".

Bernita also gave a specific example of when she became aware of racial classifications during her primary school years. Bernita's parents bought an Afrikaans newspaper on Sunday mornings. The headlines of the newspaper led readers to believe that they should fear black people. Bernita felt that her parents "weren't so angry about apartheid … they were more scared about when apartheid is over". In her view, the apartheid regime, through the media, seeded her family's beliefs that the presence of black people implied danger. Bernita had little knowledge and understanding of black people, other than black people had suffered more than what she did. Her lack of socialisation of black people did not create fear in her, as it did to her parents. Bernita felt that black people were defenceless to voice their opinions in an Afrikaans newspaper and, therefore, the judgement of black people was unfair.

6.3.2 No 'coloured' secondary schools in a rural town

Esmerelda is the only participant that was born and raised in a rural town, in the *onderdorp* (lower part of town). There were no secondary schools in her rural town and, while the closest secondary school with boarding facilities was 20 kilometres away, the school was for white learners only. Esmerelda described her primary school as well-resourced; only 'coloured' teachers taught at the school. Unlike many primary schools that continued as far as Grade 7, the primary school Esmerelda attended educated learners to Grade 8. Esmerelda's father had a vision for his daughter to obtain a better education in Cape Town and, therefore, enrolled her at a secondary school in Cape Town – secondary schools in the rural town only accommodated white learners. While excited

about her new challenge, she was disappointed when she arrived at the outskirts of Cape Town. Her childhood dreams of seeing large homes were, in reality, “sink houses”. She had wrongly assumed them to be toilets – they were people’s homes.

As Esmerelda progressed through secondary school, she began to miss her home. It dawned on her that “home is not everywhere” and that relocating “was not as easy as [she] had imagined”. She justified her stay by reminding herself to be a responsible young woman and work hard at her studies. She “had to prove that [she was] worthy to be there”. She felt she needed to be grateful for a secondary education that her parents made possible for her as they wanted to give their children a secondary education that was not accessible to them. Family members helped Esmerelda to settle into secondary school life – they had attended the same secondary school years before, and so Esmerelda felt at ease with her new school environment. When asked whether she felt any different in her secondary school as, perhaps, the only learner from a different town, she replied it was not the case, motivating that she used her family’s address details in the township as her home address. Using this address meant that her new friends at school were oblivious to her upbringing in a rural town.

6.3.3 Limiting career choices from a young age

Bernita had a passion for animals and had childhood dreams of becoming a veterinary surgeon. While a veterinary qualification was on offer at the University of Pretoria, her dream could not be met as the qualification was only offered to whites. Knowing that she could not pursue her favoured career infuriated her. Academically, Bernita was the top learner at primary school and, consequently, selected as head girl of the school. She described her primary schooling as strict and rigid as, often, she was ‘forced’ to participate in tasks. Bernita did not think there were role models at her primary school, other than her Grade 7 teacher who epitomised “doing things right”. While Bernita despised perfectionism, she was also impressed by it. She described her secondary school years as much more exciting than primary school. The secondary school became her world. She was academically sound, a prefect and, with no responsibilities as head girl, she could be an active member of the school community and engage in sporting activities.

Despite enjoying school, she felt ill-informed regarding career choices. She only knew adults who had pursued teaching after their schooling. Bernita’s teachers had limited knowledge of career choices – they only gave her information about how to become a teacher. There was no career guidance at her school. She lacked someone who recognised her abilities in mathematics and who had the foresight to steer her towards a career in mathematical sciences. In Bernita’s view, actuary, health sciences and engineering were geared towards whites and to keep ‘coloured’ people out of

university. Furthermore, mathematics teachers taught mathematics (at her primary and secondary school) because "they had to teach it" – they were not necessarily qualified to do so.

6.3.4 Intersectional discrimination

After living in Claremont for four years, the apartheid regime relocated Danah's family to a newly-formed 'coloured' township. Danah recalls being the only family in their street when they moved into their new house. As more families moved into the area, poverty was also on the rise. Danah was the only participant who spoke of apartheid as a time of rejection and discrimination within her family and among the community. When asked to describe her primary school experiences, Danah started by saying the following:

> *While males are talked of as being tall, dark and handsome, if you are dark female, it's not the same thing … People don't have the same perspective of you.*

During a lesson in Grade 7, Danah's class was learning about different cultures when some of the learners began to name-call with racial slurs that were derogatory, insulting and disrespectful:

> *It was a k-word. I was called black, you know, black bitch. I was persecuted. I was bullied awfully … The perception was that if you were fair, you were nearly white … so it was difficult. And, that drove me inwards, an introvert, because I felt inferior.*

Sharing her painful experiences as a dark-skinned 'coloured' girl, attending a school in a 'coloured' area for 'coloured' learners who associated a dark skin tone to inferiority, affected Danah's self-worth and self-esteem. When asked if she told her parents of her deeply unsettling experiences at primary school, Danah felt that matters worsened when her father, in her defence, challenged the school for his daughter's 'bullying'. The outcome was that the school denied her problem as a "real problem", and her racial bullying aggravated. Danah's name-calling continued in her community among her friends. 'Chara', a slandering name for Indian, is what one of her best friends called her. *Jy's 'n mooi Chara* (You are a beautiful Indian), were the words of her friend's father as if aligning beauty with slander would make name-calling acceptable to Danah. She questioned her identity and tried to make sense of herself as a 'coloured' woman who was denied any acceptance by her peers in her community. Her Indian family failed to accept her Indian ancestry, and she was mocked as a half-caste – a half-breed – as if she lacked a type of purity. The Muslim community also denied her, "No, you are an Indian-Muslim", a different Muslim to Cape Malays. Her unacceptance as being dark-skinned, a half-caste and a different Muslim left her traumatised as a young girl, in terms of her schooling experiences.

By the end of primary school, Danah wanted to disappear. She didn't want anyone to 'see' her because she believed the attention she was getting was not helpful. Throughout the interview, Danah did not once mention her academic experience at primary school – her lived experiences of discrimination completely over-shadowed her schooling. Instead, she learnt why she did not fit into the world as a dark-skinned Indian 'coloured' young girl.

During secondary school, Danah described herself as "shy, quiet and an introvert". She had a cousin to lean on who started Grade 8 with Danah in the same class. Over time, Danah made some friends at school who accepted her. "[J]ust a friendly group", she called them, who remained friends with her throughout secondary school. These friends stood up for Danah, and they protected her from the primary school bullies who attended the same secondary school. Her friends encouraged Danah to participate in competitions. For example, there was a science competition with schools that enrolled only white learners and, one of her friends returned from the competition saying, *Julle hoef nie te warrie nie, girls. Ons kan compete. Ons kan hulle gesiggies afwas. Almal daai questions*! (Don't worry girls. We can participate in the competition. We will be able to win. All the questions!) It was experiences like the science competition with white learners that decreased her self-doubt and encouraged her self-worth and self-esteem. In essence, she found in friendships that which she had searched for in a group. Moreover, having learners at her secondary school with academic excellence was an exhilarating feeling for Danah, giving her hope.

6.3.5 A way of life in a rural town

Two incidents occurred during Esmerelda's primary school years when she went into town, the first of which is evidenced in the following quote:

> *There was … there's this club thing. Remember it's a mining town. Now, many of the white people that came in came from different places. And, they worked there because of their skills. Now, they had this swimming pool at this club. And, I clearly remember that on a Saturday afternoon, on a warm day, we would walk to the dorp (town). It was safe to walk. Then, I would stand there for hours and hours and hours just watching these people diving and swimming. And, I imagined myself, one day I will also swim like this. But, I knew somewhere, along the lines, in my mind, that I can't swim here. It's not for me. But, it … didn't bother me.*

Esmerelda was in the latter part of her primary school years when she observed the care-free attitude of white people at the swimming club in town. However, Esmerelda noticed, not only differences in white people but also 'coloured' people. There was also a tennis court in town where she watched adults play tennis. She observed that 'coloured' people had a separate tennis court to

whites, but she was also aware that the 'coloured' men and women were of "the higher class", and they were teachers who belonged to the tennis club. While she noticed different opportunities for whites and 'coloured' and segregated opportunities, she also observed that there was a level of privilege within a racialised spectrum. For example, black people, whom she had barely seen during her childhood, had little to no privileges. White people had the most privileges, but some 'coloured' teachers were permitted to play tennis but on a separate tennis court. The same teachers taught Esmerelda and her peers the Afrikaans national anthem and, as she puts it, we sang *uit volle bors uit* (to our hearts content) on 31 May each year to celebrate Republic Day.[17]

A second incident occurred in town. Esmerelda was familiar with seeing white people in town, and their presence did not bother her. However, a critical incident in her life was when her younger brother got lost in town. A white Afrikaner woman found her brother in town. The Afrikaner woman did not believe that Esmerelda's mother was the little boy's mother because he is fair-skinned, had blonde hair and green eyes. Esmerelda's mother persuaded the police and the Afrikaner woman at length so that her son could be returned to her, but they refused to adhere to her pleas. It was only when Esmerelda's brother broke away from the Afrikaner woman and ran into the arms of his mother that the police had no choice but to succumb to Esmerelda's mother's cry for her son. Esmerelda was young and was not aware that she was witnessing an act of apartheid. She did not have the cognitive ability yet to realise that phenotypes had a significant relationship to racial classification in a rural town – her brother was considered as white through the lenses of a white Afrikaner woman and a white Afrikaner police officer.

6.3.6 Restricting 'coloured' women

Esmerelda's conscientisation of apartheid occurred during her secondary school years. During this time, her teachers taught her about the consequences of apartheid, especially its "social evils". Listening to her teachers' accounts made her realise that she had always known that she was 'coloured' – her father had told her so. He had emphasised it to her when, in Grade 7, she shared her dreams with him of becoming an air hostess, and informed her that it was impossible to pursue her dream. Working for a South African airline meant that she needed to be classified as white. She realised that she could not swim at the pool in the town because the recreational space was allocated for whites only – "I was classified as a 'coloured' and not a person".

[17] Republic Day came into being on 31 May 1910 after the amalgamation of the Cape and Natal British colonies and the South African Republic and the Orange Free State.

During her primary school years, it had not registered in her mind that 'coloured' was, in fact, a classification. "I was angry that some person could have that power to say that I belong to this group, and I can live in this area, and I can attend this school." However, it was during her secondary schooling that Esmerelda came to realise that 'coloured' women in her rural town either married at a young age or remained at home to take care of their children. From Esmerelda's perspective, the apartheid regime had deliberately built primary schools, not secondary schools, so that 'coloured' women could not be further educated. The thought of restricting 'coloured' women angered her very much.

6.3.7 Disrupting and restricting family life

Carmen's parents were a well-educated and middle-class family who lived in a residential area that experienced forced removals. Political activists frequented her grandparents' home to engage in debates and readings about alternatives to an apartheid government and, and there was an expectation of her to engage in Marxist readings and literature about the Chinese Revolution as prerequisites to politicised debates at home.

By the time Carmen was in primary school, she was aware that the government had banned family members from engaging in anti-apartheid political activities. The reality of being banned meant that they could not socialise beyond their immediate family. Often, the Special Branch disrupted family life when they carried out random home searches to check whether they adhered to the banning orders. At times, Carmen would come home from school to a house that had been turned upside-down following searches by the Special Branch. Their intrusion infuriated her grandmother as they arrived "just after she had tidied up". Despite the banning orders, the family enjoyed having parties at the house but were always on alert for the torturous Special Branch police. Banning orders also restricted those banned to specific magisterial districts. Once a week they declared their presence at the local police station – failure to do so resulted in an arrest. Carmen was not aware of the full implication of the law at her tender age – all she knew was how it affected her family as banning orders were common points of discussion in the family home. The family had close friends from diverse backgrounds, which was frowned upon by neighbours. The neighbours were afraid that they, too, would be labelled as anti-apartheid political activists, and be at risk of arrests. Therefore, some neighbours did not want to associate with her family.

As a teenager, apartheid began to have a traumatic effect on Carmen's family. She shared an account of one of her experiences when she was fifteen years old :

> *I'm just using this as an example to say yes, of course it (apartheid) touched my life …One night, I babysat. They went to the movies. My mother and her brother and his wife. And they*

> *had a three-month-old baby and a three-year-old son. And the next morning, my aunt, his wife, came to knock on the door and said that, in the night, they had come to fetch my uncle. And, you know those days we didn't have phones, so my mom got dressed … went to the tickey box across the road to phone the family home just down the road, only to discover that they had also taken her other brother and sister.* [18] *And, they were in detention without trial for [many] months. […] He was [imprisoned] for […] years. So, he saw his kid again when she went to school already. So, yes, our family was badly affected by that. My aunt was in this black cell, painted black. I mean, they were in detention without trial for [many] months. And, every night my mother and them would go … because they found out where they were being kept in Roeland Street, and they would go and talk to them through the window until they were caught. And then they were moved to another area … there are lasting hangovers from an experience like that.*

Carmen attributed her family's closeness and loyalties to each other by the traumatic encounters they experienced together, as a consequence of their anti-apartheid beliefs, which they could only resolve together. "I learnt so much from my own family because they were … they were left of ANC politics. They were hectic socialists … still are", she affirmed. Her politicised upbringing taught her to accept all people and to oppose any discrimination based on differences in race.

Carmen attended a middle-class politicised school. She always achieved good marks and never failed a school subject. Her favourite subject was English for which she always obtained a school prize. She had an inquisitive mind and found it mesmerising when thoughts were well-articulated and did not shy away from controversial ideas that made her think. Secondary school concretised Carmen's conscientisation of the anti-apartheid movement. Her involvement in political debates at secondary school and home coincided with the rise of Student Representative Councils (SRCs) at schools. The mid-1970s also brought with it the BC movement that was unfamiliar to Carmen. She admits that, at the time, she did not understand the movement. Her interpretation of the message of the BCM was that she was black, which yielded several debates about the BC movement at school. While Carmen participated in these debates at school, she never accepted her interpretation of a label of black. Carmen felt that she could not align herself with any movement based on colour or race, a view which she "had grown up with that was so deeply entrenched" in her.

---

[18] A tickey box is a term used in South Africa for a public payphone at the time when payphones were introduced in the country.

6.4 REFLECTING ON MY SCHOOLING EXPERIENCES

As I documented the accounts of each of the women, I could not help but pause and reflect on my own journey. Below is an account of my reflection:

I completed pre-school in Manenberg, where my mother's sister was a teacher. Thereafter, my mother enrolled me at Hyde Park Primary School, the school where my mother was employed as a teacher. I spent Grade 1 and Grade 2 at this school, which I enjoyed very much. Myrtle February, my teacher for both years, was ahead of her time; she encouraged independent learning with each of us completing her hand-written cards of activities that showed progression for each subject. The cards were also competitive, and I loved the challenges. I became very competitive at it, particularly in numeracy. Myrtle February became a role model to me; she became the principal of the school and, later, worked in a senior position in the education department.

Having a mother at the school as a teacher meant that I needed to stay later at school each day until my mother was ready to leave. I took the opportunity to do as many cards as possible, in different subjects, every afternoon and, in this way, I became increasingly confident in my class. Some of the cards consisted of mathematics questions, which I began to work out. I learnt to love the challenge. I also watched my mother teach, and it made me want to be like her. I liked the way her table was untidy as she prepared for her lessons, and the respect she commanded for 36 years in the teaching profession. I also admired how people would acknowledge her in the street as their strict Grade 1 teacher, and the good they spoke of her, even if they had become gangsters in the Parkwood community. She also taught their children. Therefore, my mother was a significant figure in my life as a well-respected teacher.

My mother wanted a better education for me than in a township school. Among all her siblings who were educated in Afrikaans, she had completed her schooling in English. In her mind, English-speaking schools offered a better education than Afrikaans-speaking schools. She enrolled me at York Road Primary School at the start of Grade 3 after completing my first few years of schooling in an impoverished township. Mrs Mostert was strict, and my talkative nature led to me sitting at her table for most of the year. It turned out to be beneficial as I could ask for help when I needed it. Academically, I was one of the top learners in all my grades – we had mental and dictation tests at the start of every day to develop our astuteness.

Looking back, this school was a middle-class school; my mother made it clear to me that I was entering a space where learners' families were teachers, doctors and lawyers; they were well-educated people. Her stern tone meant that I needed to portray a particular image at school that we were not poor and, in no way should the school know that my father worked on a building site. I

became ashamed that my father had not completed primary school. York Road Primary allowed me to participate in extra-mural activities like ballet, music and drama lessons that Hyde Park Primary did not offer. By the time I completed primary school in 1983, I preferred to enrol at Livingstone High School, where most of my classmates' parents had intended to enrol their children. My mother's response was negative – she was not prepared to pay for two bus journeys to get to school, and two buses back home.

My mother enrolled me at the neighbouring secondary school to York Road, called Groenvlei High School, in Lansdowne. The learners were all 'coloured' and came from a mixture of middle-class and working-class areas. I began Grade 8 in 1984. My first memories of apartheid are of my secondary school's involvement in the boycotts in support of the political unrest in the country. Two significant years come to my mind. The first was in 1985 when schools were shut down by the government in response to the school boycotts. I did not go to school for most of 1985, when I was thirteen years old and, subsequently, in 1986, I had repeated Grade 9 due to school closures and political unrest. My teachers were recent graduates, young and politically charged, and employed as beginner teachers at a newly-built school in Lansdowne. 1985 was a significant year for me as I came to know of apartheid as a deliberate system that promoted a 'gutter education'. My understanding of 'gutter education' was one of a lower standard than that of white learners, which infuriated me. I came to this understanding by attending rallies organised by political activists at schools in neighbouring areas. Rallies were jam-packed by youth which gave me a sense of belonging and purpose; I felt that I was fighting a cause that was of importance to the youth of the country. Belgravia High and Alexander Sinton in the vicinity of Athlone, the Samaj Centre and Hewitt Training College are example of grounds where seeds of anger were sown in retaliation to the apartheid government. And, my thoughts became influenced by politicised speakers such as Alan Boesak, leader of the UDF.

My teachers were, by far, my political educators; they were part of the formation of the Western Cape Teachers Union (WECTU) in 1985. All my teachers were passionate about education and they instilled the importance of education in learners, like myself. 1985 was also significant as it was my first confrontation with the police. Attending rallies meant that learners were chased and beaten by the police. I was beaten up by a police officer in Belgravia Road, after attending a rally at Hewitt College, before the schools had been shut down by the government. I didn't go to school the next day because the experience left me with aching muscles, which incapacitated me as I ran away from

the police officer. I heard from friends that three youth were killed in Belgravia Road, which came to be known as the Trojan Horse Incident.[19] Stuck in a classroom and trapped on Groenvlei's school grounds while police bombarded the school with teargas is a clear memory of 1985. Likewise, hiding behind boundary walls of homes, and holding my breath not to be heard by police officers as they searched for the perpetrators responsible for burning tyres in Lansdowne Road, was a scary experience for me. Having to hide from police officers banging on the front door of our home in Lotus River as all the learners who attended school at Zeekoeivlei High in our street were arrested and taken to Grassy Park police station, imprinted fear in my mind that led to a hatred of the South Africa police. 1985 was also a turning point in my life for a different reason; I chose sciences as my subject choices because I enjoyed the challenges of mathematics very much.

There are two reasons why mathematics resonated with me. Firstly, I only had access to textbooks – there was no local library – so I could lose myself in my mathematics textbook for hours in a way that I could not do with other subjects. I could not get away with rote learning in mathematics – I had to think. Secondly, while I found mathematics challenging, I enjoyed finding solutions – there was an exactness to the subject, but there were also different ways to find the answers. I was intrigued by this and could sit for hours delving into mathematics. My mathematics teacher, Patrick Hendricks, was stern but he saw potential in me. Mathematics was a struggle for me, and I often did not understand it, but he was patient and spent many afternoons helping me understand mathematics.

In 1988 my parents got divorced, and my mathematics became an escape – a place to hide for hours. As the eldest of two daughters, my mother was keen for me to complete my secondary schooling so I could contribute financially towards the family. However, in 1989, in my matric year (Grade 12), political unrest re-ignited amongst school communities. I had studied diligently in Grade 11 to obtain a Grade A pass so that I could obtain a university place at UCT. The following year, during the September examination of my matric year, my English exam script was torn up by neighbouring school activists who disrupted the examination process. I was devastated by the further disruption of my education and blamed apartheid for 'stealing' my opportunity to excel as an individual. From my perspective, apartheid meant fighting for an education. I had 'evidence' that my education was subservient to white learners when I participated in a revision class at UCT in my matric year. I could keep up with the mathematics curriculum of white learners, which made me feel good about

[19] On 15 October 1985, police shot and killed three youth in Belgravia Road who participated in an anti-apartheid demonstration. The police had hidden in crates at the back of a truck when they opened fire.

my knowledge; however, I was unfamiliar with the chemistry and physics curriculum during the revision sessions at UCT. I realised that there were two different curricula – one in my school and another in 'white' schools, just as the speakers had stated at the rallies of 1985. The experience at UCT made me feel of less value to white learners.

6.5 CONTROLLING CAREERS

6.5.1 Leaving secondary school with a Junior Certificate

Two certificates were awarded at the secondary school level – a Junior Certificate (JC) was awarded for completing Standard 8 (Grade 10) and a Senior Certificate (SC) for passing Standard 10 (Grade 12).[20] Esmerelda and Aisha exited secondary school with JC certificates to pursue a college education. As 'coloured' women, there were two options to further one's education at the college level: teaching or nursing. Once Esmerelda obtained her JC in 1972, she enrolled for a government-funded two-year Lower Primary Teacher's Course (LPTC) at a teacher training college in Parow,[21] the closest college to the township where she resided. The college was run by Catholic nuns who implemented a regimented and religious daily programme for their all-female student population. The nuns, who were also her teachers, were mainly foreigners from different European countries as "each of them had different accents". While Esmerelda is not a Catholic, she engaged in the regimented and religious practices to demonstrate her obedience to the nuns.

Attending a college was Esmerelda's first experience of engaging with white people. The white nuns were authoritative with clear expectations of the students. For example, they had strict rules about student uniforms, which comprised long dresses and three-quarter length coats. Before attending their teaching-practice schools, each of the students was asked to hold a piece of chalk in their hands, and to reach out to the highest part of the blackboard. If a uniformed dress were too short, the student would need to redo the hem of the dress, or the cost of a new uniformed dress would be deducted from the student's bursary. Other than the strict environment, Esmerelda viewed the college offer as "very good training" in preparation for teaching at primary schools. She felt privileged to be at the college because she was in a protected environment. By1972, the township she lived in had become "a very violent place … lots of gangsterism and fights" so the college served as her haven.

---

[20] Standard 10 or Grade 12 are commonly referred to as matric in South Africa.

[21] The LPTC qualified students to become Foundation Phase teachers, that is, Grade 1 to Grade 3 in all school subjects. Currently, the phase also includes Grade R learners, the reception year before Grade 1.

Like Esmerelda, Aisha completed her JC in 1972. She enrolled at Zonnebloem College in District Six to complete an LPTC.[22] When asked why she chose to study in District Six and not closer to her home where she lived with her family, Aisha replied that all the teacher training colleges were in the Cape Town area. Aisha received a government bursary that paid her college fees and provided extra money for books and stationery. She travelled to the college by train and, to make ends meet, her mother cared for younger children and did some crocheting to pay for Aisha's train fare. Without a government bursary and her mother's sacrifices, Aisha would not have been able to pursue tertiary studies.

At Zonnebloem College, Aisha began to blossom in the subject of mathematics. Many of Aisha's peers in her college class only completed mathematics at Grade 8 level at their secondary school – Aisha had completed Grade 10 mathematics at her school. Her peers valued Aisha's help and, often, she arranged weekend classes to assist them with mathematics. On one occasion, her college teacher was absent, and Aisha was asked to teach the mathematics lesson, which she did successfully. It was during experiences like helping her peers on weekends and substituting for a college teacher that she learnt the value of students learning from each other.

Aisha began teaching in 1975 as a primary school teacher on the Cape Flats. This meant that in 1976, when students took to the streets of South Africa *en masse*, Aisha was in her second year as a primary school teacher. Consequently, she did not participate in the student protests of 1976. She returned to Zonnebloem College in 1980 to complete the third year of study in Physical Education (PE); at this stage of her career, she was a PE teacher. She was passionate about sport, instilled in her during the first few years of primary school. Zonnebloem College also had a reputation of excelling at sport.[23] She obtained an LPTC special qualification in PE, in 1982.

---

[22] Zonnebloem College was located on the Cape Peninsula University of Technology (CPUT) campus in District Six, Cape Town. The education arm of the college closed in 1969.

[23] Harold Cressy and Paul Heneke, anti-apartheid activists and principals at Trafalgar High School, a struggle school in Cape Town, also attended the college (Adhikari, 2012).

6.5.2 Pursuing a Senior Certificate

Following Esmerelda and Aisha's LPTC, their next step in furthering their education was to complete the Senior Certificate (SC).[24] There were, however, political challenges along the way as Esmerelda articulates of 1976:

> *The riots started, and then we were asked to take part in the marches. Student leaders came and just spoke to you or you just knew there was a meeting and so on. I did all of those marches and attending those meetings behind my future husband's back. He didn't know that I did that. And, I just remember one day, they told us that there will be exams. But, if you write exams, they will hose you out with the water, so you better take part in the marches. And, I had this turmoil in me, but then I decided to take part. And, it was … I think it was … It was an exhilarating kind of experience. I marched with every being in me.*

While teaching full-time on the Cape Flats, Esmerelda studied part-time and obtained the SC in 1979 at an education centre in Lansdowne. She was offered employment at a primary school and taught Grade 4 and Grade 8. Teaching Grade 8, seeded her thoughts to complete a senior primary qualification.

Unlike Esmerelda's part-time studies, Aisha completed the SC by correspondence with the Department of National Education, from 1983 to 1984. She did not obtain a government bursary as she had already been teaching for almost a decade. Studying by correspondence meant distance learning while continuing full-time employment as a primary school teacher. Esmerelda worked hard as a PE teacher seeking promotion opportunities within the school. She received a teacher's award for excellence contributing towards her promotion as a senior teacher at the school. In her view, there was only one pathway for promotion, and that was to work hard. Becoming a senior teacher created a possibility to lead a department, and she required further qualifications to do so.

6.5.3 Senior Certificate to college education

In 1984, Esmerelda was awarded a Diploma in Education (at senior primary level) at Bellville Training College.[25] While she specialised in history and languages for senior primary, the principal

---

[24] The SC has equivalence to a current Grade 12 school qualification During the 1970s, a Grade 12 school qualification was issued with a matric certificate. Currently, the matric certificate been replaced by a National Senior Certificate (NSC).

[25] Bellville Training College offered teacher training for students who wished to pursue an Afrikaans medium of study, also called *Bellville Opleidings Kollege* (BOK) in Afrikaans. After the college moved to Kuils River, it was called *Kuils Rivier Akademiese Kollege*.

of her primary school assigned her as the main science teacher for Grade 6 and Grade 7. Teaching a new subject was much more challenging – she had to learn new terminology, prepare her lessons and prepare practical experiments, with little to no support from the school. However, she worked hard as she was determined to be a good science teacher. Later, the principal asked to meet with her to inform her that he was aware that she was next in line for a head of department position, but a male teacher, who needed the increased salary more as the breadwinner of his family, would be given the position. While his sexist and discriminatory decision infuriated her, she remained silent and applied for a role as a science teacher at a neighbouring school. Changing schools changed her career path because, within the first two months of her new science post, circumstances at the school changed, and the principal allocated her to Grade 6 and Grade 7 mathematics.

Aisha registered for a Higher Diploma in Education (HDE) at the Bellville Training College. In 1994, she obtained the HDE college qualification in mathematics, with distinction. While she loved PE, she noticed that she was able to answer mathematics questions that her peers were unable to answer. Often, her mathematics lecturer acknowledged her mathematical capabilities in the class, giving Aisha the confidence to explore mathematics in detail. By the end of apartheid, she was keen to pursue further studies in mathematics.

Unlike Esmerelda and Aisha who exited their secondary school with LCs, Anoushka completed her secondary school with an SC. Anoushka hoped to pursue a career in journalism, but her parents were unable to pay university fees; any tertiary education was only possible with a government bursary. Family members obtained teaching qualifications at Bellville Training College, and her parents felt that a college education was her only option – "you don't pay a cent if you study, and you even get money, and I could wear my sister's old clothes". Her mother's view was, "*kry iets agter jou naam* (it is a qualification that matters) – she could pursue journalism at a later date. During Anoushka's first year at college, her lecturer asked her to become the tutor of the mathematics class. Her lecturer's view was that Anoushka showed a deeper understanding of mathematics compared to her peers – a potential of which Anoushka was unaware. She stated that the division of her Grade 12 class into higher grade and standard grade learners and her choice to be educated with the standard grade learners as an act of rebellion towards her teacher made her forget that she "actually loved maths". With a new responsibility in the college class, and the opportunity to help her peers, the lecturer directed weaker students to seek help from Anoushka. Helping students at college is one reason that Anoushka attributes to her realising that she had the ability to teach mathematics. All the while, she had not been given the opportunity at school to demonstrate her potential in mathematics. At college, she had "great teachers" who had "great insight, great attitude, great mannerism[s] … who treated everybody the same … would have time for you with

any problem that you had". When probed as to why she did not pursue tertiary education at a university, she stated that she did not believe that she would be successful in pursuing opportunities at UCT, and UWC required payment that her parents were unable to make. "It was never about results. My results were good", she responded. She pursued the four-year HDE at Bellville Training College in 1983. Nine years later, mothering her children, she completed the fourth and final year of the HDE qualification at college. Her husband encouraged her to pursue journalism; however, she opted otherwise to minimise her studies as she was a mother.

Like Anoushka, Danah began her post-schooling with an SC at a teacher training college. Danah wanted to pursue social work but, like Esmerelda, her father insisted that she pursue teaching, partly because her lingering name-calling at primary school withdrew her into a "very, very shy" young woman. Her father registered her to begin a primary teacher's course at Hewitt Training College in 1981, which, like Zonnebloem and Bellville colleges, were created for 'coloured' students. She also received a government bursary. Her father was very strict, and Danah had no intentions to defy his decision. Enrolling her for teacher training upset her very much – she recalled crying for many weeks until she met friends at college that helped her to feel better. Academically, she did well at college and won an award each year. By her final year, she specialised in biology, physics, mathematics, education and language. In 1984, Danah continued her full-time studies for another year, graduating with a teacher's diploma at Hewitt Training College, after which she began her teaching career. Seven years later, in 1991, she completed an HDE, part-time, at a different college.

6.5.4 College to university

After Esmerelda completed her Diploma in Education at Bellville Training College in 1984, she registered for a Bachelor of Arts (BA) degree, as a correspondence course with UNISA. In the final year of her degree, in 1991, she became involved with a primary school mathematics cluster at UWC. This particular South African cluster was given the opportunity to participate in a course at Leeds University in England, United Kingdom (UK). Arriving at Leeds for a three-month course in 1992 was the first time that Esmerelda worked in an environment where people were from all parts of the world; each were interested in the political climate in South Africa concerning apartheid. Esmerelda only knew of her day-to-day experiences – she was unaware of the atrocities caused by apartheid – the South African Broadcasting Corporation (SABC) was government-owned and, therefore, government controlled – protests were rarely televised. She realised that foreigners knew more about the political context of South Africa than she did, and this lack of knowledge made her feel out of place.

Esmerelda described her experience at Leeds University as profound as it was here that she realised that there were no differences in people – each had dreams and desires, and each enjoyed having fun. The international group lived together and cared for each other like family. By the end of the trip, she described her South African and international peers as her "brothers and sisters". She realised that she was not a 'coloured' person – she was a human being. It took being outside of South Africa's borders to experience what it is to be human, as South Africans and as international citizens. The profoundness of the experience of 'being human' catapulted her thirst to learn; she worked hard, travelled extensively, and made use of all the resources at her disposal. She returned to South Africa as a changed woman. In 1994, Esmerelda completed her Bachelor of Education degree, equivalent to an Honours, at UWC specialising in mathematics education.

6.5.5 Senior Certificate to university

Bernita and Carmen pursued university qualifications as soon as they matriculated. Carmen matriculated first in 1974, eight years before Bernita, and fifteen years before I matriculated. Compared to Carmen, Bernita and I are the only two participants who studied full-time at university and completed our undergraduate degrees before full-time employment. Bernita was accepted at UCT to pursue a Bachelor of Science (BSc). With a history of top grades at her school, she secured private bursaries. Stellenbosch University was not a consideration for her as a 'coloured' student, and UWC only accepted her after she signed up at UCT. She completed her BSc degree in three years in 1987 at UCT. Her experience at UCT was daunting because Bernita's first language is Afrikaans, and UCT's medium of instruction is English. It was not so much the Afrikaans language (or a culture) as a barrier; instead, to Bernita and her friends, the English language represented people from the southern suburbs of Cape Town, which represented wealth. After she completed her undergraduate degree, she was offered employment as a mathematics tutor in 1989 at a different HEI and, subsequently, enrolled for an Honours degree in mathematics at the HEI. By the time apartheid ended in 1994, Bernita was employed as a lecturer of mathematics at an HEI.

Towards the end of Carmen's final year at school, she had provisional acceptance at UCT. When she obtained her end-of-year school results, she failed mathematics – she had never failed a subject throughout her primary or secondary schooling. Carmen believed that she was not the only learner that, unexpectedly, failed a secondary school subject. She was of the view that the Special Branch had labelled her and punished her politicised family. Carmen wrote a supplementary mathematics examination and passed well and was keen to engage in tertiary education. By the time she obtained her much-improved result for her supplementary mathematics examination, it was too late to start the academic year at UCT. According to Carmen, UCT made provision for Grade 12 learners whose families were anti-apartheid activists and who were at risk of being targeted by the Special Branch.

While she registered as a student at UNISA, she had full access to UCT and felt part of the UCT community.

Carmen began a teaching career on the Cape Flats before she completed a BA degree at UNISA. She taught English and History at a secondary school where she witnessed certain tendencies in the community that society labelled as 'coloured'. However, she emphasised, these tendencies were of a working-class mentality. She continued that while some people in the community found synergy with the tendencies in the community, and aligned themselves with the practices of the community, it was not a 'coloured' mentality. She was adamant that 'coloured', like any racial group, was defined by the apartheid government as a homogenous group, but "this is *certainly* not true for how society is structured". When asked if she had experienced the label of 'coloured', she described the following experience in the 1970s after she left the teaching profession for a few years to increase her earnings at the head office of a retail institution:

> *[T]here was this woman. She was British, and she had interviewed me for the job. And I got quite a decent job. I was earning more than my principal once I started this job. And then, after six months, she called me in for an appraisal, and she said to me, "We are very happy with you but can't you do something about your accent". And, I said, "What do you mean?" And, she said, "You know, it's so 'coloured'." And, I looked at her as I was cold with shock. And, I said, "Look, that's the way I speak, and I am not changing my accent". And, that was the first time that I was shocked into realising how some people look at other people and label them. But I never let that [label] knock me down.*

Returning to teaching was a tough time for her, working full-time and studying by correspondence. Nevertheless, by the end of apartheid, Carmen had graduated from UNISA with an undergraduate degree and a diploma in education.

6.6 REFLECTING ON MY TERTIARY EDUCATION

My tertiary studies began in 1990 at UWC, where I enrolled for a BSc degree. I was not accepted for a BSc at UCT; instead, I was accepted for a BA, which I turned down. UCT informed me that while I had obtained sufficient points to pursue a BSc degree, many other students had applied, and they relied on their computer system to randomly remove excess students from the original student list. Also, UCT targeted learners at schools before their final matric examination – I had not written the September examination for the matric cohort of 1989 as my script had been torn up by neighbouring school activists. With no September examination results, perhaps I was not considered.

Furthermore, I did not know anyone who had been to university, and so I was unfamiliar with alternatives. I assumed that the university knew best. Nevertheless, the denial unearthed a mountain of anger, mainly because I was denied the opportunity to pursue post-schooling at an institution that was in reach by public transport from my home. As a result, I had to attend UWC, 20 kilometres from my home, having to hitch-hike daily in order to be given a chance to pursue a Bachelor of Science degree – there was no public transport to the university.

Not being accepted at UCT for a BSc, drove me to work harder at UWC. I obtained a government bursary on condition that I pursue an HDE after my undergraduate degree – the government paid for the first three years of my studies. UWC was the first place that I engaged with black students. There were very few white students. I knew that the apartheid regime had racially segregated people, but I had no reason to believe that we were different at university. All students were doing subjects of their choice. The only differences I noticed were differences in wealth, mainly because I was insecure coming from an impoverished family, and consciously aware of spotting wealthy students in the university's cafeteria. In the lecture halls, it felt like all the students had the same intentions of passing the modules.

Academically, I did well; I was one of the top students in my second year of physics and third year of mathematics. My home became a space where my mathematics peers met and solved mathematics questions. My academic path changed in my third year when I was awarded a prize for the best student in chemistry who wished to pursue post-graduate studies. I felt obliged to do an Honours degree in chemistry in 1993, knowing that it was not the right choice – my preferred choice being mathematics. I found the Chemistry course difficult and resonated towards the parts of the subject that had synergy with mathematics. During my Honours year, the Head of Department of Chemistry, a white Afrikaner, advised me not to pursue chemistry to Masters level, despite my good academic record. As a woman, he said, I should choose my career wisely, as I had a responsibility to have children and to look after them. He recommended that I became a teacher. I was dumbfounded at his remarks but also angry at myself as, by this time, I had decided to pursue an HDE, because the government would pay for it, and, in return, I 'owed' the government three years of service or returned payments. In 1994, I graduated with high marks; I intended to teach for three years, and consider alternative employment opportunities.

6.7 IMPEDING POTENTIALITY

6.7.1 Identified as prominent teachers by visiting academics

At the start of the South African democracy, Aisha continued her employment at a primary school on the Cape Flats teaching mathematics to senior primary learners, as well as teaching PE. As an

outstanding teacher, Cambridge University Press (CUP) approached her to contribute towards textbook writing of primary school mathematics. In 1994, Cambridge University began a project, funded by the British Council, in partnership with an HEI in a different province to the Western Cape.[26] And, in 1995, an NGO nominated Aisha to participate in the Cambridge University programme for a diploma with an HEI. She was awarded a Diploma in Mathematics Education with distinction in 1996.

Aisha thrived being taught by international lecturers in a professional higher education space in South Africa. It was here that she learnt about philosophies of teaching and learning, exceeding the knowledge she had been taught at college, and the knowledge she gained from her teaching experience. Learning a new philosophy of teaching, such as constructivism, became a professional gateway to her career. In 1998, she completed a Further Diploma in Education (FDE) at the same HEI, with distinction. While she was well-read in mathematics textbooks, the FDE course taught her how to read mathematics education literature and taught her how to identify mathematics in day-to-day contexts. Aisha found it curious that it took a professor from abroad to teach her about mathematics in South African beadwork and art. The international lecturers gave her the knowledge she sought but was unable to find in school textbooks, and at college. The NGO gave her the opportunity to deliver workshops to teachers, seeding an idea of becoming a professional mathematics educator in higher education.

As a History and English teacher, Carmen felt threatened that an oversupply of these teachers would result in her forced relocation to an unfamiliar area outside of Cape Town. Therefore, she had the foresight to reskill herself in mathematics, registering, through correspondence, at UNISA in a subject perceived as a skill-shortage area in the teaching profession. In her view, a pragmatic decision led her to teach herself university mathematics for three years, with only two days of face-to-face lecturing each year. After studying university mathematics at UNISA, she registered for a mathematics pedagogical qualification at an HEI. An FDE required Carmen to implement teaching and learning strategies in her classroom. In 1998, Carmen was awarded the FDE qualification – her decision to reskill herself changed her career; she taught mathematics at FET level instead of English and History and enjoyed teaching her new subject very much.

While Carmen completed her FDE qualification, visiting international mathematics education lecturers recognised her as a prominent student, and asked if they could observe her lessons as part

---

[26] In 1994, the Cape province was divided into the provinces of the Western Cape, Eastern Cape and Northern Cape.

of their research in South Africa. Carmen agreed and, through their research, became involved with the HEI. When the HEI became aware that Carmen had resigned at her school, after almost 20 years of teaching experience, they offered her employment. She became involved in mathematics textbook writing with local publishers. Employment at an HEI, as a consequence of participation in international research in her classroom, lay a foundation for professional mathematics education in higher education.

In a sense, Carmen's childhood dream of being a teacher, to make a difference to society, had exceeded her expectations of working in a classroom. By working within a higher education space, she could extend her teaching to help develop teachers. She felt blessed that her life had shaped itself with a consciousness that there were forces that helped her on her journey. Her advantage of being born into a middle-class, educated family, and her awareness that many people were not born with the same advantage, she thought, was perhaps part of the reason why she chose teaching as a career in the first place. Reflecting on her career, Carmen felt that she had been successful – it "wasn't an arrogance but a need to lift people up". Her social conscience, embedded from a young age, meant that she remained in contact with her students. Often, her students would contact her when they were reminded of her as they pursued their career pathways and so, Carmen felt that she had made a difference to society. She attributed her successes to luck, but she was also clear that she made her own luck, mainly because she "had the foresight to make the most of her life".

6.7.2 Textbook writing and workshops

By the 1990s, universities were relatively unfamiliar with in-service teacher training as their central role in education was to educate pre-service teachers. Universities sought partnerships to accommodate the need for their new responsibility for in-service teacher training. By way of example, in 1989, Esmerelda became involved with the Realistic Mathematics Education in South Africa (REMESA), an international project that required researching, designing and facilitating workshops with teachers using the project's materials. The year 1989, was also a time that Esmerelda became an active participant in the Association for Mathematics Education of South Africa (AMESA) – the first non-racial association in school mathematics. In 1991, Esmerelda became involved with classroom-based research as part of the Primary Math Project (PMP), which gave her further opportunities to present research findings and deliver workshops at the national AMESA conferences, coinciding with the completion of her BEd degree in 1994.

In 1996, she attended the ICME in Europe, broadening her knowledge of mathematics education. At this stage of her career, she continued to be employed full-time as a primary mathematics teacher and began her Master in Education course. In 1996, the Maths Teaching and Learning Initiative

(MALATI) was formed as a three-year project involving the three universities in the Western Cape and set up an office in Bellville in 1997. Esmerelda was part of a Belhar Forum who met regularly and attended workshops, such as, *Probleemgeoriënteerde onderwysmetode en -tegnologie* (Problem-centred teaching methodology and technologies) presented by the Stellenbosch University MALATI group. In effect, Esmerelda was enhancing her learning of mathematics, designing school materials, facilitating workshops, researching, and contributing extensively to mathematics education. Esmerelda described the period of a school-based forum as profound; it was informal, voluntary, they wrote and shared their own materials, and it was non-racial. "We worked together as human beings, as mathematics teachers", she added. In 1997, she registered for a Master's programme at an HEI.

In 2000, Esmerelda completed her coursework for a Master in Education degree and began a career as an advisor in mathematics. When asked why she did not choose to pursue a career at an HEI, she responded that she did not feel she was good enough to work at an HEI – no one gave her any indication that she was good enough while studying and doing research. She advanced quickly through the ranks at the education department, indicating that she *had* the capabilities to be a professional mathematics educator – she just didn't know it and no one told her. Throughout her employment at the education department, she worked hard and was trained extensively – provincially and nationally – to the extent that her Master in Education had to come to a halt. Only once she took an early retirement did she resume the delivery of workshops, writing mathematics materials and participate in research as a facilitator and coordinator at various HEIs.

While Esmerelda participated in MALATI workshops, Aisha was seconded to MALATI from 1998 to 1999 at the request of its director. She described her secondment as the beginning of her involvement in higher education. Initially, she felt intimidated working alongside academics as she was consciously aware that she lacked theoretical knowledge within the mathematics education academic space but, soon enjoyed engaging with the mathematics. Following two years at MALATI, she took the voluntary severance package. When asked why she chose to leave the teaching profession when she had upskilled herself and had an excellent reputation as a hard worker, she responded that there were two reasons. Firstly, there was professional jealousy within the school which gnawed at her and, secondly, she had worked her way up the professional ladder to a deputy principal position, and she felt that her time was taken up by the learners' social problems. She missed doing mathematics – she resigned and spent the following year writing mathematics textbooks.

In 2001, Aisha started a part-time contract as a mathematics education specialist at an HEI. During her eight-year employment at the HEI, she spent a large portion of her time doing fieldwork across a range of districts. In her capacity at the HEI, she became a project coordinator and was part of the management team. However, she could not complete her Masters and opted for a Postgraduate Diploma in Education (PGDip) and awarded the qualification in 2004. In 2009, she returned to the HEI that inspired her to become a professional mathematics educator and began employment as a mathematics lecturer, facilitator and research coordinator until 2011. Aisha graduated with a Masters in Mathematics Education at the HEI in 2012. She returned to her home town and continued mathematics textbook writing for a publisher until 2015. Her four-year stay at home was apt, and a break from tertiary education. Nonetheless, she continued to write textbooks for other African countries, such as Botswana and Nigeria. She was headhunted and employed at an HEI in 2016, where she continued her employment as a mathematics lecturer.

After Anoushka completed her three years of college in 1986, she began full-time employment as a secondary school PE teacher. After two or three years, the principal of the school asked her to teach mathematics when he realised that mathematics was her second major subject at college. Anoushka was fearful and felt she was not up for the challenge, but her concern of inequality and the neglect of weaker mathematics learners during her schooling experiences remained with her. Within her first term of teaching mathematics, she stopped the separate teaching of higher and standard grade learners. She treated all her learners equally, motivating them and spending sufficient time with different groups of learners. She became drawn to the teaching and learning mathematics because it allowed her to think of alternative approaches to solve mathematics. She aimed to change the mindsets of her learners because her experience had taught her that, despite *knowing* that she loved mathematics, “a teacher had made [her] feel negative about maths”.

After a few years, two mathematics curriculum advisors noticed her potential and asked if she would be willing to be a national trainer for a new curriculum in mathematics at a neighbouring province. She was surprised advisors asked her because she had not yet completed her fourth year at college, and she would be delivering workshops alongside colleagues who, she believed, had more knowledge than her. Anoushka was not aware that she could further a career in mathematics education outside of the classroom. She felt that she had not received any guidance about career paths. Her parents were happy that, as a teacher, she was earning a salary and, in their eyes, she had become a good member of the community. She reflects, “... if I did [give myself] recognition, where would it have taken me?” When asked if she doubted her capabilities, she stated that she didn’t doubt her capabilities as a mathematics teacher.

In her view, there were no opportunities to grow or further her studies. She felt that she did not have another platform to validate her mathematics knowledge other than in a classroom environment. Recognition by the advisors opened new avenues of which Anoushka was unaware. In 1995, Anoushka completed her fourth year of college. Armed with a full qualification, and confidence, she became the head of the mathematics department at a secondary school in 1996. She became a mentor and master trainer in a project run by the Education Department, a national marker of matric examinations for eight years, wrote local and international conference papers, and completed a three-year comparative study of mathematics textbooks for a publisher (from 2005 to 2007).

In 2007, an opportunity arose as a provincial coordinator of mathematical science at a national institution in South Africa. Anoushka applied and, in 2008, she began her ten-year employment journey with the institution. Anoushka's role included the extensive delivery of workshops with teachers and to create partnerships with universities. Working alongside university professionals and students at all the Western Cape universities, carved an avenue to work in higher education spaces. She participated in extensive national training to ensure that she was sufficiently knowledgeable and skilled to train teachers, professional educators, students and learners. In 2011, for example, she managed a government project that required her to lead 80 fieldworker coordinators and 1 600 fieldworkers. Her experience awarded her a senior council member of a significant association, creating further opportunities to share her professional expertise. Asked why she wanted to share her professional expertise, she responded with the following words:

> *I wanted to make sure there is a platform for all. Teachers are stuck in the classrooms, and we need people out there to give them hope. I tried to be there to give them hope, give them advice. When I did workshops, I would take resources to them and make sure they have names of people that they can contact if they need help with finances, for example, If they need help … call this person. I had a sense that people just didn't know where to ask for help. At some stage, I was also in that position. The position that I had found myself in, in previous years, was not the position I wished for others. That is why I worked hard at those things. Things that bothered me … so that I can make it different for somebody else.*

Her potential was also demonstrated in 2007 when Anoushka joined a delegation from the presidency to Brazil after being selected from thousands of entries. She entered a competition about the application of mathematics in real-life contexts and, after four or five rounds, she was selected. When asked where she had learnt this knowledge, she stated that she had had no formal education in applied mathematics; she believed that her ability to interpret mathematics and reason created the opportunity for her. In 2011, she completed an Honours degree in development studies and

mathematical science. During her ten-year journey, she met professional mathematics educators who asked her to deliver workshops at their institutions. After her resignation, she continued her partnerships within higher education spaces as a professional mathematics educator part-time or on a contract basis.

6.7.3 Mathematics as a means to an end

After Danah completed her college diploma, she Danah began her teaching career at a primary school on the Cape Flats spanning a period from apartheid to a democratic South Africa. While Danah's inspiration at college was science, the school she taught at required her to teach mathematics. Her college experience of mathematics had led her to believe that mathematics "was more of a tool to get to the next level". She considered herself as an 'enthusiast' of mathematics, not a mathematics expert. She gave the example that she was fascinated by floral formulae, a representation of the structure of flowers using numbers. Danah taught at the school for 23 years. When asked why she remained at the same school for such an extended period, she hinted that, perhaps, she should have moved to another school but, employed at the same school rooted her. The school became a haven of professional stability using the time to heal herself of personal challenges and to focus on her children and her learners.

In the mid-1990s, Danah's school enrolled their learners for AMESA tests; the learners wrote the tests and obtained low marks. Baffled by their poor results, Danah turned to invitations to attend the *Probleemgeoriënteerde onderwysmetode en -tegnologie* (Problem-centred teaching methodology and technologies) presented by the Stellenbosch University MALATI group. The workshops unpacked a 'problem', taught the teachers different strategies, and the value of sharing their thinking. Subsequently, her learners' test results improved markedly, which she ascribes to the quality of the workshops. In her words, she became a "reflective teacher".

At a neighbouring school, a secondary school teacher began a movement to bridge the gap between primary and secondary school mathematics. Danah admired his willingness to engage with primary schools, working together to identify misconceptions in mathematics. This secondary school teacher began employment at an HEI and invited Danah to a Grade 7 course that resonated with her interests in problem-solving, where she worked with teachers from different schools. In 2000, she completed a BA degree through correspondence with UNISA and, in 2004, she was appointed as a senior teacher followed by a master teacher appointment in mathematics and natural sciences at her school.

Danah also engaged with working-class communities supporting children in hospitals, children in care and less advantaged pre-primary schools. She also worked with social workers against child

abuse in 2001, was the secretary of the Youth Leaders Against Crime (YLAC) from 2001 to 2002, and campaigned for the rights of children throughout her teaching career. In this way, she was introduced to people with different backgrounds, different religions with different levels of authority and, who looked for opportunities to make a difference in youth's lives. Danah noted that through these experiences, she learnt how to care for young people. She was encouraged and motivated by her experiences working alongside teachers at mathematics workshops and alongside community activists who did everything in their power to develop the youth in a working-class 'coloured' township.

Danah completed BEd (Hon) in 2004, and approached a university regarding teaching at tertiary level:

> *I wanted to make the progression [of teaching] from primary school to a tertiary institution; then I was told that I couldn't make that shift automatically - I had to have trained adults as well.*

The university's response changed her career, and she sought an alternative career path. She was offered a contractual facilitator position at an NGO in the Western Cape, which she felt would give her the experience of adult education. Working at the NGO changed her teaching focus to science, using mathematics as a language of science instead of a subject in itself. She completed a Master in Natural Sciences and Science teaching in 2007. In 2008, she was appointed as a full-time facilitator, and in 2012 became the leader of the NGO. Her passion for intellectual reading was concretised by the completion of a PhD in curriculum studies, which was awarded in 2015. The NGO delivered workshops to teachers in mathematics and science in partnership with HEIs in the Western Cape. Danah views herself as a "maths enthusiast". She believes that the problem-solving courses of MALATI, her coming to know of constructivism and inquiry-based learning steeped her into mathematics to the extent that she stated the following:

> *I've been so swung over and embraced the methodology, but in taking that on, and wanting to make a contribution, I am painfully aware that I am not the mathematician I ought to be or want to be, but I'm not there yet. That is why I am modest about my abilities in maths. I just want to inspire the next teacher to teach maths in a practical, enthusiastic and engaged way with children.*

Her dream was to open a teaching and learning academy for pre-service teachers of mathematics and science, which she explained in detail involving qualifications, sites of professional learning and structures of the programmes. She believes that a teaching and learning academy would be her

legacy – she had supportive, creative and hard-working colleagues to actualise her vision. Danah held her colleagues in high esteem, particularly her female colleagues whom she described as follows:

> *People who help you grow unselfishly. And, it's usually from a woman to a woman. That's been my experience. All the women in my life have been helpful. I can't understand how people can say that women in business are terrible and they back-bite and undermine each other. My life has been so fortunate. All the women that I have worked with and worked through and work with by helping, have given of themselves to help me, as a colleague.*

6.7.4 A passion to 'do' higher-order mathematics

My experience of Bernita was very different compared to the other participants for two reasons. Firstly, since Bernita taught mathematics at tertiary level, she did not consider herself as a teacher. While I challenged Bernita with the view that a lecturer of tertiary mathematics was also a form of teaching, but at a higher level of mathematics compared to school mathematics, Bernita maintained her view that her passion was mathematics, not the teaching of mathematics. When asked the difference between lecturing mathematics for education and lecturing mathematics for engineering or business, she replied that the former was a social science while the latter was an exact science. Social sciences, she felt, was too inconclusive and vague while an exact science as mathematics provided an exact answer.

Benita's employment at an HEI spanned 21 years. She remained at the institution as it allowed her the flexibility to work from home. She gave the example that her children were growing up, and an academic environment gave her the freedom to collect her children from school and spend time with them. But, she also remained at the HEI because she felt supported by her colleagues. Ultimately, after 21 years at an HEI, she resigned because she was not challenged sufficiently in mathematics. At her HEI of employment, mathematics was taught as a support subject to other careers in, for example, business, and not as a subject with equal status to business.

Delving deeper into the motivation for her departing from the institution revealed that she remained a junior lecturer, despite achieving a Masters in mathematics qualification. As an academic institution, she was expected to conduct research and, from her perspective, being a woman with children to better *their* chances and careers, demanded sacrifices from her side. While she acknowledged research as a fair expectation of an HEI, it was not the reason why she had pursued academia; her main reason was her passion for mathematics which she wanted to enjoy with like-minded individuals. At the same, when questioned about alternate university support for women, other than the flexibility of working from home, she responded that when there were meetings set

up concerning ‘women’s issues’, she chose not to attend as she was not interested; yet, ‘women issues’ contributed towards her lack of participation in research. Concerning research, Bernita was of the view that she was a ‘doer’ of mathematics, a practitioner, and not a ‘thinker’ of mathematics. By a ‘thinker’ of mathematics, she meant researching, writing and publishing research articles which she grappled with. Instead, she enjoyed the exactness of mathematics. “Mathematics is clear” – there may be different ways to find the answer but, an answer could still be found.

When a position of tutoring mathematics became available at an alternate HEI, she was keen to apply. While her move to the HEI was not a promotion, her new employment allowed her to teach higher-order mathematics, such as quantitative numeracy and quantitative skills. In this role, she could work independently, part-time, and design a new mathematics curriculum. Here, she felt that she was given the chance to plan a curriculum that took into account the progression of mathematics. She had had the aspiration of a student support unit in mathematics for many years and, her new employment made it possible. Identifying content areas that lecturers assumed to be completed at the secondary level was key to the intervention (for example, absolute values, logarithms, binomial theorem). In her view, university lecturers assumed students had learnt certain topics at school; however, some of the topics were not taught in the Curriculum Assessment Policy Statements (CAPS) at secondary school.

6.8 PERSONAL AND PROFESSIONAL CHALLENGES

6.8.1 Personal challenges

One of the personal challenges experienced was studying by correspondence or studying part-time. Bernita did not want to complete her first degree at UWC in the 1980s as she felt she did not want to go to a university created for ‘coloured’ learners by an apartheid government. She was not accepted at UCT because she ‘failed’ mathematics; and studied by correspondence through UNISA. When she worked full-time, she was forced to study part-time, which meant that she always had to “work through the night and run [her] day-job at the same time”. When she decided to return to teaching, she studied in the train and then went to university to pursue her studies until late at night. While she was studying, she had a baby who was breastfeeding, which created further challenges in completing her tertiary education.

Esmerelda also revealed that 17 years into her marriage, they adopted their first child, and her life changed as she tried to keep a balance between work, her husband and motherhood, and complete a Master’s degree. Aisha, Danah and I have been single mothers during our postgraduate, part-time studies while in full-time employment.

Danah brought to the fore a personal challenge of changing her mindset towards white and black people. It was only when Danah began to work at an NGO in 2008 that she started her socialisation with people other than 'coloured'. Furthermore, while Danah supported a democratic and a non-racial South Africa, she believed that, for a while, her mind was "trapped in an inferiority complex". She described her journey to undo her fixed mindset as a long and painful journey, yet with benefits.

> *I specifically chose to work in an NGO where this is where I could make a conscious contribution, in a small way, to changing opportunity for the next person, particularly, the previously disadvantaged because, for me, my life's value has acquired another value where I am going to insert my best into making it better for somebody else.*

Danah battled with her prejudices against white people in post-apartheid South Africa, mainly because she felt it was ironic that she needed to persuade a *white* person to fund an NGO to change the mathematics and science fortunes of black learners. Each time she spoke with a white funder, she had to consciously remind herself that she was dealing with people who have hearts and who care about contributing towards the lives of the oppressed. Her idea of a white person became demystified; the mystery of separating people racially was ruptured, and white people more human. Through continuous engagement, she was able to break down the barriers of *her* racialised mind, imposed on her during apartheid. Her mind was broadened and matured.

6.8.2 Lack of achievement

While some of the participants viewed a role in higher education spaces as a promotion, simultaneously, it was not viewed as an achievement. One of the reasons highlighted was that for most of the women's engagement in mathematics education in higher education, their work was always on a contract basis. The implications of contractual agreements meant that they were always on the lookout for the next contract as research assistants, material developers and delivering workshops. For example, after Esmerelda retired, she returned to a similar role at the university, after she had had a senior and permanent position at the education department; which is, perhaps, why she felt that she was not good enough to be fully employed at a higher education institution. Similarly, Anoushka, who was employed as a provincial coordinator at a national institution, pointed out that while universities valued her for fostering partnerships, mentoring students and teachers, presenting at conferences, writing conference papers and delivering workshops, like Esmerelda, she was never offered full employed at a university. Without permanent employment, both could not be considered for promotional and leadership opportunities in mathematics education.

Carmen's lowlight in her career was that she was never classified as a lecturer in higher education. Instead, the teaching staff in the in-service teaching department were classified as specialists or facilitators. While she had evolved to a senior specialist or facilitator, the classification was an anomaly as the teaching staff of in-service teacher training were classified as lecturers. While she acknowledged that she worked mainly with in-service teachers, she also worked with pre-service teachers when lecturers were co-opted for sabbatical cover. In a sense, she was doing the work of lecturers but not considered as academic staff; specialists or facilitators were considered as administrative or support staff. It was not as if she had not tried to pursue further studies:

> *You know, I had a very bad experience with my supervisor when I did my Masters. And, in the end, I walked away… and I had to start again. It took me five years at the end of the day, three of which were really wasted. It broke me physically. It broke me emotionally.*

Bernita had a passion for 'doing' mathematics and being challenged mathematically. Because she was not inclined to engage in research and publishing research, she believed that the university could not consider her as a senior lecturer, despite her 21 years of service to the institution. Bernita understood that researching mathematics was important in an academic institution; she considered the research she conducted on material development and the extended curriculum as highlights in her career. However, her research was not recognised in her department for two reasons. One reason she gave was that the mathematics department dissolved and was assigned to a mathematical sciences department as a support subject. Her identity, she states, was lost as a mathematician, on her own, in a supporting role which made her feel undervalued. The second reason she gave was that working in an academic institution meant that education was important. By education, she meant "methodology and pedagogics" which didn't interest her at all. She continued:

> *And because of that, I made it difficult for myself to vertically go up in the institution because it was easier for people who are more that way inclined …. social sciences, educationally inclined to go up that way in the institution … and that was one of the reasons why I resigned … I just had enough of … me not going anywhere.*

In my view, Bernita's conceptualisation of lecturing mathematics included 'doing' tertiary mathematics with students who had a passion for mathematics, as a stand-alone subject. From Bernita's perspective, teaching mathematics meant teaching school mathematics, which she associated with educating learners. She did not feel it necessary to educate lecturers on how to teach adults – that is, students, mathematics.

It would be untrue if I said that it was easy to understand Bernita's lived experiences, partly because she had a binary view of life: A situation was right or wrong, black or white with little flexibility for anything in-between. As I continued to probe Bernita, she began to give glimpses of her feelings, always in relation to another: She felt like an *outsider* when the mathematics department was dissolved, and she was relocated as the only person to represent mathematics in mathematical sciences department. She felt that she was *looked down on* by her mathematical science peers even though it was a strategic leadership decision of the higher education institution to separate and relocate members of the department. Her feeling as an outsider in her new department was amplified by the national statutory body for the particular mathematical science, ignoring her wealth of expertise, resulting in her feeling *undervalued* at her institution. Bernita also revealed that she felt *silenced*, like many non-whites at the school that her children attended, who were displeased by white privilege at schools. While her feelings of an outsider, looked down on, undervalued and silenced, were felt in different contexts, long after her schooling, and during post-apartheid, they were felt in relation to different national institutions. She had learnt the value of being disciplined and a hard worker, and it had worked, to some extent, until she reached a glass ceiling of facing national institutions. In all her glimpses of her true feelings, Bernita's displacement occurred two to three decades after she finished her secondary schooling. The point I am making is that displacement was not necessarily always felt during apartheid but was also experienced in a democratic South Africa as a consequence of apartheid. Despite her hard-working and disciplined character and her qualifications, she did not escape the whip of apartheid in post-apartheid; her displacement revealed itself in post-apartheid by the reshuffling of departments and the closure of the mathematics department in the HEI.

6.8.3 (Re-)creating a purpose for race

Anoushka worked for a national institution who asked for the racial categorisation of individuals in their documentation under the auspices of redressing the racial inequalities during apartheid. While working with students, teachers and learners she was expected to document racial categories and, if they questioned why they had to self-identify a 'race', Anoushka explained its purpose as redress and equity. Anoushka was, therefore, a catalyst in promoting racial difference through the powers of a national institution.

Anoushka's concern in apartheid was never about race – it concerned inequality. In a democratic South Africa, she was witnessing increased inequalities. When probed, she added that while there were more career opportunities, bursaries to attend universities, and employment opportunities, within the school environment, inequalities remained evident. For example, Anoushka's reality was that there were more classrooms allocated to specific subjects; however, a basic necessity like

working toilets was absent. Anoushka was unable to make sense of her observation but, in her view, in "white schools … you won't find that". I sensed that Anoushka realised, during this part of the interview, that while she was of the view that the government was addressing past inequalities, independent of documenting racial categorisations, she was a witness to greater inequalities in post-apartheid which she was unable to explain. Outside of her employment, she felt that a racial categorisation was unnecessary as "we are South Africans". Anoushka failed to realise that, as an employee of a national institution, a 'holder' of power, she was asking individuals questions about their personal lives (their gender, parental income, address as examples) that concretised racial ideology through emphasising economic disparity.

When asked if a label of 'coloured' had influenced Carmen's role in higher education in post-apartheid South Africa, her response was "no, categorically no, never", indicative of her continued defiance of her associations with the categorisation of 'coloured'. When asked if the label of 'coloured' mattered in a democratic South Africa, Carmen responded that she could not deny that the label of 'coloured' mattered because institutions, like universities, continued to ask for racial categorisations to redress the historical inequities associated with the consequences of racial classifications. Institutions, like universities, use self-identified racial categorisation as indicators for equity and redress to the extent that, she believed, universities would go into detail to choose an employee. For example, not only has there been a preference for a black female but, more specifically, a black African female. When asked if Carmen thought that equity should be redressed using racial categorisations, which were superimposed from the apartheid racial classifications, she felt that "the country ha[d] not done enough to raise people's education", and the question was difficult to answer. She continued that "there isn't equality in education so there will always be disparity". She, for example, compared previously advantaged schools during apartheid to low-income schools in South Africa. From Carmen's perspective, previously advantaged schools tended to produce learners who are confident and eloquent and, "in the world of work, those are the things that matter".

Aisha regularly experienced challenges to the extent that she felt she needed to prove her worth as a knowledgeable and skilled mathematics educator. For example, when Aisha delivered workshops to teachers in predominantly white Afrikaner areas, like Vredendal in the Northern Cape province, in the late 1990s, teachers often disregarded her presence as a facilitator, talking and walking out of the room while Aisha was presenting the workshop. A colleague felt the need to resort to faking Aisha's title in order to get the attention and respect from the teachers, which frustrated Aisha as she felt that she had to have a higher status with a title to be accepted by the attendees. She worked

hard during the workshop to demonstrate her mathematics knowledge and, she had to 'prove' herself in the workshops to gain respect.

However, twenty years later, Aisha continued to 'prove' her mathematical knowledge in a democratic South Africa, though her textbook writing gave her the confidence that had an in-depth knowledge of the mathematics curriculum and, therefore, was a curriculum expert. For example, at her institution of employment, white Afrikaner students made petty complaints via the student representatives to the Head of Department (HOD), without approaching Aisha. Aisha felt that she would have given the students a voice if they had approached her as their lecturer. However, they did not. Instead, the white Afrikaner students who sat on the one side of the room continued to complain to the HOD while the other half of the class, mainly 'coloured' students, sat quietly on the other side of the room. When asked why she did not mix the students, she replied that the venue didn't provide the flexibility for group work, despite her requests for the class to rearrange their seating, undermining her authority. Usually, when Aisha was called for a meeting with the HOD, and the complaints put to her, it was made by anonymous students, frustrating Aisha even further. In essence, the white Afrikaner HOD did not follow the grievance procedure for students and, with the assistance of the white Afrikaner students, (un)intentionally belittled Aisha, who felt humiliated by how issues were handled.

6.9 REFLECTING ON MY CAREER

In 1993, Dullah Omar, a South African political activist and a cabinet member in 1994, asked about my studies. He said that the country was entering a new phase and there would be opportunities for me as an educated woman post-1994. I hung onto his words and searched for opportunities after I graduated in 1994, but I could not find it. I recall thinking that, perhaps, the country was in transition and the ANC was not yet ready for the change I was seeking – that is, a role in implementing transformation to democracy. Subsequently, in 1995, I began my first full-time employment as a mathematics teacher at a secondary school in Heideveld on the Cape Flats. I enjoyed my role as a mathematics teacher because I was able to educate learners who, like myself, wanted to be educated but were often posed with challenges related to working-class environments. For example, some learners never thought that they could do well at mathematics; there were socioeconomic challenges in their families that directed their attention to employment rather than an education. I saw myself as a role model to them and thrived in my working-class environment.

In 1997, voluntary severance packages panicked teachers at the school, and a 'last-in-first-out' strategy was discussed during staff meetings. The strategy meat that as I was the last person at the school to be permanently employed, I would need to leave the school. While I was in a skill-

shortage subject, I felt I was young in my career, had intentions to leave the profession once I paid back the government bursary in services. Also, the head of mathematics resigned, the principal felt I was too young for the position, so the head-of-department structure of the school was rearranged to have one head of department that managed mathematics and science. It was painful to watch temporary staff members panic about their future and, consequently, with much consideration, I resigned to complete my service at the end of 1997.

Also in 1997, I saw an advert for teachers in the UK. By this time, I was frustrated that I could not find anything more than a position in a chemical laboratory for a paint firm. I pursued the application, which was accepted, and I made my way to the UK. Within the first two years, a principal applied for my work permit. I was surprised that she followed through with the application after she had resigned as principal since, in Cape Town, no one had fought for me – I had to find my way on my own in South Africa. During the next five years, I studied part-time and gained qualified teacher status by being awarded a British teaching qualification. As soon as I qualified, my salary doubled as I applied for the role of Director of Studies for a cohort of 210 learners. Again, I was surprised that my application was successful and that I was trusted to look after the social, emotional and academic welfare of secondary school learners while teaching Mathematics and Statistics. I represented overseas trained teachers nationally as a teacher of excellence. It felt like I had excelled in an unfamiliar country while, in South Africa, I was unnoticeable.

Being noticed for my hard work and potential increased my confidence. I applied, and successfully became a mathematics teaching and learning consultant in a high achieving district, working with consultants who were Oxford and Cambridge graduates. For this role, I was shortlisted with an Oxford mathematics graduate, and I was selected for the job. It was the first time that I worked in a middle-class environment where no-one knew of my working-class and racialised background. And, as I excelled in the teaching profession in London, I also excelled in the consultancy position for seven years, extending my role to senior primary mathematics, and across three districts. In my view, with no knowledge of my past, I was recognised for my capabilities in a city more 13 500 kilometres from my city of birth. In other words, it was only after I was given opportunities to educate learners and work alongside teachers and mathematics education experts abroad, that I began to feel my value in education, and I wanted to share my knowledge and experiences in South Africa.

I returned to South Africa in 2012 and, in 2013 succeeded at obtaining a role at an NGO that had affiliations with universities in South Africa and extensive partnerships on the African continent and abroad. The NGO taught African students in a postgraduate mathematical sciences programme,

and trained disadvantaged teachers to improve the quality of their teaching. I was asked to mark scripts, facilitate courses and, after three years of mundane tasks and my requests for greater responsibility, I was promoted to a programme coordinator. Within the network of institutions, outside of South Africa, on the continent, I excelled.

Thinking that I needed to further my qualifications as a lecturer, I completed a Master's degree with distinction as a distance learning course in the UK. The university in the UK invited me to deliver a talk to their education faculty, which increased my self-esteem. The secretariat of the institutional network in Rwanda employed me to advise Rwandan colleagues on the indicators for the successful design of a teacher training programme, to work alongside the Director of the national teacher training programme in Cameroon, and write and deliver training material for their national inspectors and teachers. I helped to design a professional in-service teacher programme in Tanzania and to seek national partnerships in Kenya. I cannot deny that the institution in South Africa did not acknowledge me but, in my view, by the time I was asked to chair teacher training across the six African institutions, I had given up, as the request felt like a professional gesture. Instead, I wanted to be recognised for my capabilities in my birth country, South Africa, which did not happen.

6.10 CHAPTER SUMMARY

This chapter presented the findings of seven women classified as 'coloured' during apartheid who journeyed their way into professional mathematics education in higher education spaces. The chapter aimed to understand their lived experiences of their schooling, tertiary education and their careers, and whether a 'coloured' identity played a part in their lives.

The chapter departed with my journey of an iterative process to construct themes for the findings. After deliberation themes evolved to the normalisation of racial difference, hierarchical racial othering, controlling careers, impeding potentiality, and personal and professional challenges. Weaved into the findings were my autobiographical reflections of my schooling, tertiary and career experiences.

In the following chapter, I will discuss the methods used for data analyses in preparation for sharing the analysis itself.

CHAPTER 7:
LIVED EXPERIENCES, IDENTITIES AND RACE

7.1 INTRODUCTION

The purpose of this study was to explore the lived experiences and identities of 'coloured' women as professional mathematics educators in higher education. This chapter constitutes the heart of the study in that it analyses the findings of the data, as outlined in chapter 6. The results are analysed through the lenses of interpretivism and phenomenology (as discussed in chapter 5) and CRT (as discussed in chapter 2). The study drew from the literature on 'coloured' women in chapter 3 and key theorists of (mis)recognition, namely Charles Taylor (1989, 1998), Nancy Fraser (2000, 2008) and Axel Honneth (1995, 2007) (as discussed in chapter 4). The lived experiences and identities of the seven participants are by no means representative of all 'coloured' women in South Africa; each of the women was influenced differently by their socioeconomic circumstances and geopolitical contexts within which they found themselves, in the same way that each of the women experienced (mis)recognition differently. While I am aware that identities are multi-faceted with infinite depths, I am drawing on the words of Taylor (1989: 29) who verbalised that we often talk of a particular identity because it is what comes to mind at a particular time, especially when this identity is put to question; in this study, a 'coloured' identity is put to question.

7.2 METHODS USED FOR DATA ANALYSIS

According to Cohen *et al.* (2011: 537), while there is not a singular way to analyse qualitative data, the authors suggest a "fit for purpose" strategy. Lenses of interpretivism and phenomenology are fit for purpose because the study demands multiple meanings and understandings of lived experiences as shared by each of the seven 'coloured' women. As Cohen *et al.* (2011: 537) predicted, it was a challenge to make sense of the qualitative data, particularly in deciding on themes. Listening to the recorded interviews and transcribing the interviews myself, provided the opportunity to reflect on their narratives, pauses, hesitations and tone of voice concerning the interview questions.

I understood that selecting common themes for analysis was an iterative process. With this in mind, my intention of this single-case study was to categorise key issues. Where necessary, I documented key issues separately for each participant. While themes were created deductively, an opportunity was also given for new themes to emerge from the transcripts. As the findings in chapter 6 unfolded, sub-themes emerged, most of which I include as a third-level thematic analysis in this chapter. Using the themes from the findings in chapter 6, I reflexively analysed the schooling and

tertiary experiences of the participants followed by their pursuit in careers as mathematics educators in higher education. I will describe these themes next.

7.3 DESCRIPTION OF THEMES

To begin with, the materialisation of race came to the fore, mainly during the 'coloured' women's schooling years under three main themes. The first theme, normalisation of racial difference, signifies that as young girls, the participants had no understanding that laws of segregation were in place to keep racialised groups apart. A normalisation of racial difference was brought to the young girls' attention by observing their parents' behavioural responses to apartheid laws, without motivating reasons for their behaviours. In this way, encounters of racial differences became normalised. The second theme concerning their schooling experiences is hierarchical racial othering. On rare occasions, learners across racial groups competed with one another, such as in sporting activities. During these encounters, the young girls focused on the material resources of their counterparts; materialisation became indicators to them of what it meant to belong to particular racial groups as it created a sense of othering. In turn, othering was placed in a hierarchy of racial identities. Despite the hierarchy, a conscientisation of anti-apartheid was also part of lived experiences for all the young women in this study. Intersectional powers of learning mathematics is the third theme. The theme considers identity as being in a state of flux of belonging and not-belonging and considers the intersectional powers that are at play while learning mathematics.

Next, I turn my attention to themes of the tertiary education experiences of the seven 'coloured' women. Two themes are analysed in this section, namely, controlling careers and impeding potentiality. 'Coloured' women had two options if they wished to pursue tertiary education with the assistance of a state bursary – teaching or nursing. Most participants pursued teaching as a career as it was all they knew, through the experiences of friends and family who had pursued teaching. However, the apartheid government used its power to control and limit the careers of 'coloured' women (and men). By controlling and limiting careers, the potentiality of each of the 'coloured' women was hampered because, either they opted for a teaching career as a way to participate in tertiary education or as a means to fund their tertiary education. Either way, these journeys were filled with personal and professional hardships, left to work out a career path into higher education for themselves while, simultaneously, maintaining the will and determination to continue their tertiary studies. I include a sub-theme of impeding potentiality to highlight how decisions made by the apartheid government swayed their potentiality.

In order to understand the highlights and challenges of pursuing careers in mathematics education post-apartheid, it was important to consider different pathways into higher-education employment

in more detail. On the one hand, this type of employment coincided with the amalgamation of teacher training colleges and technical colleges into university technikons. On the other hand, most of the participants reskilled themselves and retrained to change or improve their qualifications. More so, routes into higher education were not always straight forward; therefore, attention on the alternatives the participants carved out for themselves to teach at higher-education level was necessary. These possibilities came with their own hurdles and, at times, some of the participants were turned away, which served as turning points in their lives. To be turned away is a form of rejection and, consequently, a form of misrecognition that can easily be overlooked. This theme also includes reflections on repurposing professional mathematics education and academia's blind eye to 'coloured' women.

7.4 SCHOOLING EXPERIENCES OF WOMEN CLASSIFIED AS 'COLOURED' DURING APARTHEID

7.4.1 Normalisation of racialised difference

The data in this single case study suggests that normalising differences in people transpired before the young women began their primary school years. For example, signposts of *net blankes* (whites-only) and *nie-blankes* (non-whites) brought meaning to them through their lived experiences of public spaces. Through living and experiencing these spaces, they were already confronted with the phenomenon of apartheid before even knowing what it was or why it was. They did not have the knowledge to make sense of why their experiences of physical spaces were regulated in the ways that they were, but they knew they needed to obey these regulations. Danah's mother, for example, responded in anger when Danah's brother persisted in wanting to play in a park designated for 'whites only'. How does one explain to a child what this means? So, instead, of offering explanations, and questioning, what happens is a mute acceptance of what is encountered – things are the way they are, thereby normalising different lived realities for different categories of people. To Danah, witnessing her mother's frustration and continually experiencing prohibition as she navigated through public spaces, seriously affected her. She recognised that her experiences of her world were different from those of others and that these experiences fed into her otherness. Her lived experience and identity construction correlates with Mead's (2003: 37) view that socialisation is significant in a young person's life because, it is amongst family, neighbours and strangers that the external environment seeps its way into a young person's life.

Embedded in the encountering of differences is an othering that communicates less worth. From a perspective of identity construction, less worthiness correlates with Taylor's (1998: 25) theory regarding the politics of recognition that "a person or group of people can suffer real damage, real

distortion if the people or society around them mirror back to them a confining or demeaning or contemptible picture of themselves". In other words, apartheid sketched a reality which made segregation normal; it normalised othering based on race, but it also normalised race based on worth. Through a lens of phenomenology, Taylor's (1998) politics of recognition infers that apartheid fostered a predetermined script that translated as: To be white meant to be worthy and to be 'coloured' meant to be less worthy and, consequently, apartheid's normative practice of racism could be interpreted as having an association with one's identity.

Taylor (1989: 27) defined identity as "the commitments and identifications which provide the framework … [from] which I can try to determine … what is good, or valuable, or what ought to be done, or what I endorse or oppose" and, when the process of identification brings meaning, then its meaning equates to identity.[27] One way of looking at this view is from the perspective of a 'coloured' identity that's meaning is brought to the fore via encounters of less worth. However, Aisha gives insight into a different understanding of feeling less worthy as a young 'coloured' girl that affected her identity, "… I was staying right opposite the school, and I couldn't even attend this [white] school. I had to go through this agony of walking many miles, (five) kilometres to another school". While she was labelled with an image of being less worthy by not being permitted to attend a school for white learners, she challenged societal assumptions that 'white' was better than 'coloured', and that the classification of 'coloured' determined her becoming. Instead, she chose to make sense of her life, by looking at her capabilities, and imagine a future. Aisha recognised that her circumstances were prohibitive and discriminatory, and she questioned why her circumstances were different from whites, but, she knew she could not change the society in which she lived.

On the contrary, she could change her circumstances by turning her consciousness inward and focusing on her own, individual attributes. Aisha's choice to focus on her capabilities is an example of what Taylor (1998: 27) refers to as "being true to myself and my own way of being". By these words, Taylor means having the freedom to choose what we want to develop; a type of authenticity that values our moral feelings as significant so that we are more 'in tune' with our natural way of being. From an interpretivist lens, by delving into her feelings and being in tune with her nature, Taylor's perspective of authenticity suggests that Aisha is an example of a 'coloured' women who turned her attention to what was in her power, namely, her capabilities.

---

[27] Appiah (2009:670) defines identification as "the process through which an individual intentionally shapes her projects – including her plans for her own life and her conception of the good – by reference to available labels, available identities."

The research findings also reveal, that depending on their contexts, the women navigated their regulated spaces differently. While they often complied out of fear, or just not understanding why things were the way they were, and hence normal to them, there were times when they felt brave or secure enough to defy the rules of apartheid. Carmen, for example, complied by not using a public toilet reserved for 'whites only' but felt confident to sit in a 'whites only' train carriage when accompanied and reassured by her mother. As she reflected on this during the interview, she interpreted her mother's decision not to sit in an overcrowded train when the 'whites-only' section was empty, as following her conscience and reclaiming her dignity. Her mother's resistance – while knowing the repercussions of possible arrest – is indicative of Taylor's (1998: 38) explication for universal equal rights, as a politics of equal dignity, which he argues, is different to a need to be recognised. To Taylor (1989: 15), dignity is a form of attitudinal respect, like a way of "thinking well of someone", not a type of recognition. To be recognised requires a recognition of one's authenticity as an individual (or group). Carmen's mother's response demonstrates her exercising a right for equal dignity, not exercising a right for recognition by whites. In other words, equal rights do not equate to recognition and are insufficient *for* recognition. Therefore, through an interpretivist lens concerning Taylor's (1998: 38) explication of universal, equal rights, having equal rights is not sufficient for identity construction. Taylor affirms that what is needed is a recognition of an individual or group's distinctness from everyone else, not that they can 'fit in' with everyone else.

Carmen added further meaning to her mother's choice to be present in a white train carriage, not as a pretence that she was white but to demonstrate the absurdity of enforcing a law of apartheid "on a hot day, [when] the [non-white carriage of the] train was too full to get into". On the one hand, Carmen's conscientisation of rights has synergy with a prerequisite of recognition from the perspective of Honneth (1995, 2007). To Honneth (1995: 112, 2007: 139), every human is entitled to the same status treatment, as every other individual. Carmen's mother modelled their entitlement as human beings by choosing to be in the same carriage allocated for whites. From an identity construction perspective, the experience can be interpreted as Carmen's witnessing of her mother, taking it upon herself, to be accorded a right during a time of apartheid legislation. However, there is also a distinct deflection from Honneth's (1995) theory of recognition in that Carmen witnessed a right, somewhat artificially, because of an absence of a necessary intersubjective process between her mother and someone else. For Honneth (1995: xv), an intersubjective process is necessary between two people because, it is during this process, that one's attitude towards oneself is influenced. Based on Honneth's (1995, 2007) theory of recognition through a phenomenological lens, Carmen's mother pointed out a human right, to be treated equally as any other human being.

However, the experience did not evolve into the development of her mother's self-respect (nor Carmen's self-respect) because there was no intersubjective process.

7.4.2 Hierarchical racial othering

The lived experiences of the seven 'coloured' women illuminate that story-telling amongst friends and family was one way of messaging a racial order. By racially separating people, narratives of an 'other' were left open to the imagination. It did not matter whether the narratives were true or false - what mattered was that it created an unknown other. How would a young girl know that the story presented to her by a person in her day-to-day socialisation was a false narrative? Instead of permitting the young girls to socialise across racial lines to make up their own minds, storytelling implanted fear. As an example, Anoushka's parents were "frantic" about their daughter frequenting a black township to undertake a two-year secondary school mathematics programme, as they felt it was "too dangerous" for her, creating subtexts that black was inferior to 'coloured'. Aisha, too, was told to cover her mouth as black people needed teeth for their witchcraft (an inhuman activity). How would a young girl know what was meant by black other than by stories they were told? Apartheid did not only infer racial hierarchies in terms of establishing whiteness as superior, and hence privileged. What has unfolded are racist hierarchies among 'coloureds' and blacks (and Indians). In other words, oppression is not limited to whites concerning others, but in terms of a racial hierarchy; 'coloureds' believed that they were better than blacks. A racial hierarchy means that racist thinking and actions are as prevalent among other racial groups as they are among whites. Posing questions like, where do you live? Where are you from? Where is your family from? What school did you attend? Which university did you attend? Location is an example of a racial marker that appears to decrease the severity of enquiring about race, and ultimately one's socioeconomic background. For this reason, one could 'look white' but not 'be white' – location was associated with *how* persons lived, and *how* one lived was associated with and compared within a racial hierarchy. As Ladson-Billings (2005: 117) infers of CRT, we should be conscious of racial markers that extend beyond what appears to be simple questions, such as location because these types of questions are part of a larger power at play that judge one person or group over another to the benefit of one.

To Anoushka and Aisha, by the time they were young girls, racial segregation was a way of life. They were born into a historical period when "it [race] was just an accepted fact" and determined by one's physical features, as Anoushka put it. The texture of one's hair, the shade of one's skin, one's body shape and posterior coupled with how one sounds when speaking, the words we use and the amplitude of our voices. The racial markers are offensive and develop further notions of racial order. Therefore, Anoushka and Aisha were 'placed' into a racially segregated and racially ordered

way of life, not only by their limited socialisation, which created ways of being but also by a lack of socialisation.

As espoused by Erasmus (2017: 53), during colonisation, race was foregrounded by ordering human bodies in a particular hierarchy of 'othering', and continued to do so into apartheid. Erasmus (2017: 50-52) posits that colonisers used a particular look as an indicator of 'Europeanness', as far back as the Enlightenment and, while in power, used race categorisations to mark human bodies. Anoushka and Aisha's lived experiences of race concur with Erasmus' view that apartheid had the power and racialised eye to continue colonial marking of bodies as human and non-human relative to 'whiteness'. Through a phenomenological lens concerning Erasmus' theory of race, marking of human bodies, relative to a superior 'whiteness', was a normative practice because the apartheid regime had the power to do so.

Anoushka's lived experiences at sporting events, reveal her insecurities when white learners had all the sporting accessories to 'look the part' of an athlete, and all the necessary resources on the field to show their readiness for competition. Her insecurities in the presence of white learners correlate with Mead's (2003: 37) view of the second stage of the formulation of the self, that is when the self interacts with the attitudes of the (white) group of learners, and the self absorbs the attitude of these learners. However, since Anoushka (and her school peers) did not have sporting accessories, she interpreted her experience as witnessing economic inequalities between white and 'coloured' learners, instead of absorbing the attitudes of the (white) group of learners as Mead suggests. While the racial difference was normalised during apartheid, Anoushka was not of the view that apartheid was a fair phenomenon as inequality made her feel "a sense of inferiority" in comparison to her white counterparts. She considered herself to be a good athlete and equipped to compete against anyone, but her sense of racial inferiority created doubt not only in her sporting abilities but in her equality to compete in the first place. Rather than absorbing attitudes of the white learners, Anoushka absorbed feelings of inferiority.

Honneth (2007:74) extends Mead's view of attitudes of absorbing attitudes of another; He proposes that it is the attitude one has towards oneself that has more considerable significance. In other words, Anoushka's feelings of inferiority were influenced during her encounter with white learners – that is, she experienced herself as inferior compared to the external manifestation of their material goods. Honneth (2007: 36) defines self-esteem as an "awareness of having good or valuable capabilities" (a feeling of self-worth) that can contribute to a community. In the case of Anoushka, if the encounter between herself and her white counterparts were one of mutual recognition, then her attitude towards herself would make her feel unique and special in that community, and develop

her self-esteem. However, any self-esteem that Anoushka felt among athletes at her school diminished in the presence of her white counterparts. To Honneth (1995: 113), mutual (esteem) recognition is less about universal values and more about an "evaluative frame of reference within which the 'worth' of characteristic traits (and abilities) can be measured". In other words, the inferiority that she felt had less to do with inequality and more to do with racialised worth.

Anoushka's interpretation of her experience was that the playing field was not level between white and 'coloured' athletes. She was unable to find common ground and a common frame of reference to judge standards between whites and 'coloureds'. When she responds, " …I think that was my reality check", she means that she discovered that whites and 'coloureds' were playing on 'different fields' and this discovery made her reflect on her worth.

Through a lens of phenomenology, while Honneth (2007: 36) highlights esteem as an important feature of recognition, esteem recognition may not be an entitlement to every person because it cannot be demanded from persons. Taylor (1998: 25) forewarns that when inferiority is internalised, even if barriers to progress are removed, an individual or group may feel incapable of grasping new opportunities for progress. Nonetheless, Anoushka did not allow inequality to impede her relation-to-self negatively. She did not let her experience prevent her from pursuing her passion for sport. She did not let racialised inequality deter her from becoming a good athlete. Instead, she challenged her racialised feelings of inferiority, and pursued her passion for athletics into adulthood, albeit only amongst 'coloured' athletes as legislated by apartheid.

Spending the first nine years of Danah's life in the company of her Muslim family of Indian ancestry in Johannesburg, was different to her new life in a 'coloured' township in Cape Town. A township was the melting pot of ethnic groups. Not only were there the Cape Malays but also families born from marriages across ethnic groups, like Danah and her siblings. Danah's lived experience in the township revealed a multitude of discrimination where analysis thereof resonates with intersectionality theory, as foregrounded by Crenshaw (2003a,b, 2009). Crenshaw (2003b) describes intersectionality as "the multidimensionality of marginalised subjects' lived experiences". Drawing on the intersectionality theory of Crenshaw, Yuval-Davis (2011: 4) was interested in how different situatedness of different people affect and are affected by socioeconomic and political projects. Danah's situatedness (intersections) of 'coloured' and Indian ancestry was as a consequence of the apartheid regime's project of relocating diverse groups of people into a singular and racialised socialisation. Danah was discriminated as a dark-skinned, half-caste Indian-coloured girl that affected her sense of belonging to a 'coloured' community. Outside of her socialisation she did not belong to white, black or Indian racialised groups. Within her socialisation she was

devastated for being considered an Indian-coloured and half-caste, leaving her lost and confused regarding her identity. To Yuval-Davis (2011: 15), the "emotional components of people's constructions of themselves and their identities become more central the more threatened and less secure they become" which is perhaps why Danah's identity floated 'somewhere in-between' the intersections of race and ethnicity as she tried to painfully work out where the boundaries of each intersection lay and, consequently, she became an introvert. In this space of not belonging, Danah ignored any capabilities that she had at primary school.

When Danah was in secondary school, she fostered a deep and sincere friendship with learners in her science class. The sense of belonging that she sought among her primary school peers and her community, she found in her new group of friends. This group was significant to Danah because, as a collective, they won a science competition when they competed against white learners, which made her feel good about herself. While she did not have a sense of belonging in her community, it took her to compete and win her white counterparts before she felt good about herself and recognised her capabilities. Danah acknowledged that by winning white learners with the help of her friendship group, "slowly, over the years, [she] came more into being [her]self". Therefore, through an interpretivist lens, in the absence of a sense of belonging to a racialised ethnic group, Danah found that she needed to demonstrate to herself that she was better than a white racialised group in order to recognise her own capabilities because the "[t]he white man had done such a good job to give the 'coloured' person the perception that they were somehow better than others". Through a lens of CRT, Danah's lived experience reveals that in the space of hierarchical racial othering, we think better of ourselves when we can demonstrate that we are better than whites. Twenty-six years after the ideological demise of apartheid, racial constructs and hierarchical racial othering continue to shape how historically oppressed and marginalised people conceive of themselves (Ndimande & Neville, 2018), indicating the extent to which race has been normalised in contemporary South Africa (Mangcu, 2015; Pillay, 2016; Soudien, 2013).

7.4.3 Intersectional powers of learning of mathematics

It is worth noting the passion that each of the participants had either for mathematics as a disciplinary field or to teach mathematics. Their personal relations with the school subject influenced the uptake of mathematics post-schooling. Aisha described her relationship to mathematics as a marriage – she loved mathematics and chose to have a life-long commitment to it. Her teachers and friends perceived her as 'good' at mathematics because she was able to explain the content clearly and concisely – at times, in the absence of a mathematics teacher, she explained the content to her peers.

Bernita appeared to want more from mathematics and her mathematics teachers. In her view, the primary and secondary school mathematics teachers lacked knowledge of career paths in mathematics (other than teaching), such as the actuarial and health sciences. In addition, the mathematics curriculum did not offer her the depth and breadth of mathematics she was seeking at school. Thus, Bernita was of the view that her mathematics teachers and the mathematics curriculum did not accommodate her potentiality as a mathematician.

Anoushka chose to join the large group of standard grade learners in her class, not because she was weaker at mathematics but because she sided with her friends whom the teacher ignored as standard grade learners. Her passion for mathematics began as a drive to seek ways of finding solutions to mathematics and mathematics-based problems. She discovered that she had a somewhat unique and innate ability to explain different strategies to 'do' mathematics, a strength she would not have known had it not been for her teachers and peers insistence that she was 'good' at mathematics. While the mathematics teacher felt that Anoushka had the potential to do higher grade, she neither pursued Anoushka's potentiality in mathematics at higher grade level nor encouraged her beyond the realms of her schooling.

Yuval-Davis (2011: 16) brings to the attention a relationship between identity construction and belonging, that is, there is a dialogical relationship of identity that is not individual or collective but pendulates between the two in the space of *becoming*. In this space, she argues, "processes of identity construction, authorization and contestation" occurs. Extrapolating Yuval-Davis' conceptualisation of identity, the identities of Aisha, Anoushka and Bernita were fluctuating in the space of becoming – each questioned the knowledge of their teachers or the behaviour of teachers towards groups of learners. Their becoming was not about a 'coloured' identity in the classroom. Instead, their becoming exposed their passion for mathematics and new axes of power: two mathematics curricula, and knowledge of career pathways that centre around mathematics; revealing new *intersectional powers* with new understandings. Therefore, through a phenomenological lens from Yuval-Davis' (*ibid.*) point of view, the lived experiences of Aisha, Bernita and Anoushka illuminate that the mathematics teachers implemented a restricted curriculum which paid no or little attention to its application in careers that centred around mathematics. While higher grade mattered more to teachers despite the smaller number of participants in the class, higher grade was also an upper limit to mathematical knowledge at secondary school. Certainly, the intersectional powers had the power to include and exclude those who wished to pursue mathematics in their future.

7.5 TERTIARY EDUCATION OF 'COLOURED' WOMEN

7.5.1 Controlling careers

By the time the seven 'coloured' women began their tertiary education, they shifted into yet another racialised, tertiary education system. Other than two participants whose studies were privately funded, the remaining participants were funded by the South African government. The provision of state bursaries opened the otherwise closed doors of tertiary education. However, the rigidity of this financial support also implied the unattainability of any other career aspirations. Accepting a bursary to become a teacher or nurse meant that Danah, for example, could not follow her dream of becoming a social worker; in the same way that Anoushka could not become a journalist, and Esmerelda would never become an air hostess. While presented as an opportunity, the acceptance of a bursary pressurised 'coloured' women into particular career paths. Signing up for government bursaries meant that, once qualified, bursary applicants either returned the financial support in term of service or repaid the amount. In this regard, race was used not only as a weapon of oppression and discrimination, but it was wielded as a tool to pre-designate individuals not only into particular careers but lives – both professionally and personally. More than 25 years into a democracy, the careers of 'coloured' (and black) students continue to be controlled through state bursaries by funnelling their futures, not only in teaching but also by awarding bursaries to the government's preferential subjects and age groups.

According to Taylor (1989: 12), every person is entitled to respect, because each person is part of human life. At the same time, every person should also be allowed to develop and progress in a manner that she deems fit. Taylor continues that autonomy is the bridge that joins together respect and the integrity of developing oneself. Furthermore, when someone is denied autonomy, it means that (s)he is prohibited from choosing what (s)he wishes to do with her life. In a way, denying autonomy redirects a life and, ultimately, changes an identity as we define who we are in relation to what is significant to us. While it might seem that the choice of a career was just between one of two professions (nursing or teaching), what is being lived is that of a redirected and prescribed identity for 'coloured' women, which strips away the autonomy and agency to be, for example, the social worker, journalist or air hostess. Therefore, through an interpretivist lens, Taylor's (1998: 57) conceptualisation of autonomy concerning identity suggests that when the autonomy and agency of 'coloured' women were hindered, they could not be true to themselves; their potentiality was denied because they were not given a chance to determine, by themselves, their ideas of a good life.

Aisha, on the other hand, was driven by socioeconomic hardships, and felt compelled to support her mother, having watched her work hard and earn a pittance in return:

> *She had to look after other people's children, and she did knitting and crocheting [for Aisha's train fare to college]. And, my stepfather he was a bricklayer, so many times, he did not work. So, I wanted to leave school as soon as possible to help my mother. So, I left school Standard 8 to pursue the two-year teacher-training […]. Again, [my teachers] came to me and said, don't you think that you should go onto matric. And, I explained to them that I need to help my mother and they accepted my decision.*

This sense of a moral obligation to family felt by participants, such as Aisha, contradicts the stereotypical views of 'coloured' women, for example, where the narratives of 'coloured' women centred around promiscuity (as revealed by Bowler, 2016 and Jansen, 2019). As a young girl, Aisha watched her neighbour pretend in public that her mother and grandmother to her children was their "maid". By law, a white male and 'coloured' woman could not marry and, their fear of imprisonment if the apartheid regime discovered their inter-racial relationship, culminated into a life of pretence. It seemed unfathomable to the apartheid state that a white male or female would want to have a relationship with a 'coloured' or black person. However, white people, by virtue of their superior status, could not be punished. By labelling 'coloured' women as prostitutes in these relationships, they were reduced to sexual objects. This provides a more plausible explanation for this relationship, from the perspective of the apartheid regime, as opposed to a consideration that two people from different races could actually be in love. In turn, black or 'coloured' people who were in inter-racial relationships were not defying apartheid laws, so had to be punished for not knowing and accepting their designated inferiority.

While the apartheid government played their part in controlling careers, Aisha did not necessarily interpret the offer of a teaching bursary as a restrictive measure. She was fortunate in finding a resonance between her desire to become a teacher, and receiving financial support to do so. Within Aisha's socialisation of 'coloured' students and college lecturers, she was praised for her knowledge as a mathematics teacher and her pragmatic approaches as a physical education (PE) teacher. On the one hand, apartheid 'succeeded' because Aisha excelled within a segregated group of 'coloureds' for which she was praised as a practice teacher.

From Honneth's (1995:xvi) perspective of esteem recognition, Aisha displayed some traits of individuality which her peers valued at the teacher training college because "we had fellow students who did mathematics as far as Standard 6". With her assistance, the students began to understand Aisha's knowledge and style of teaching better than the explanations of the mathematics lecturer. In terms of her identity construction, the intersubjective process between herself and her peers created a necessary struggle for recognition that questioned her self-worth and, subsequently, their mutual

recognition raised her self-esteem. While Aisha's self-esteem developed within a teacher training college designated to 'coloureds', her recognition was not in relation to a multi-racial society as a whole. Therefore, from a phenomenological stance concerning Honneth's (1995:xvi) theory of identity construction, the apartheid regime regulated conditions under which 'coloured' women, like Aisha, could build their self-esteem – she was deprived of contributing towards mathematics across racialised teacher training colleges.

7.5.2 Impeding potentiality

After completing grade 12, Bernita, Carmen and I were not accepted at the university of our choice. This was not unusual – given the construction of racially segregated tertiary institutions. For example, Bernita's choice of career as a veterinary surgeon was not possible for 'coloureds'; the Bachelor of Veterinary Science qualification was restricted to whites only at an Afrikaans-medium university. She had all the academic and language credentials to participate; however, institutional legislation prohibited her from doing so. At the same time, she recognised that her rejection had to do with her race. Fraser (2000: 114) is clear that to be denied a place at university, with the same credentials as one's peers, is to be subordinated. However, Fraser's conceptualisation does not concern identity because she believes that identity construction infers a lower status. Fraser's view is that overcoming subordination requires recognition of having full capabilities to function on par with all other peers. Fraser (2000: 113) articulates that challenging status subordination is more to do with challenging institutional norms and practises because it is precisely the effects of norms and practises that prevented 'coloured' women, like Bernita, entry into the institution in the first place. For example, there are institutional norms that associate being white to competence and incompetence to 'coloured' (and black). Therefore, from a phenomenological perspective, Fraser's theory of misrecognition (2000) advocates that there are institutions that misrecognise 'coloured' women like Bernita, not because of her lack of capabilities but because of the norms and practises that whites are sufficiently competent for certain careers and 'coloureds' (and blacks) are incompetent in these careers. It dismisses 'coloureds' before they can attempt these careers and, therefore, impedes their potentiality.

As I reflected on my own application to a university, and subsequent rejection to pursue science, I am reminded of Honneth's (1995:xii) argument that, "One's relationship to oneself, then, is not a matter of solitary ego appraising itself, but an *intersubjective* process, in which one's attitude towards oneself emerges in one's encounter with an other's attitude towards oneself". I applied to study a Bachelor of Science degree at UCT, as the closest university to my home. I interpreted its impressive location as a university of prestige, and I wanted to be part of it. I was confident that my good results would permit my acceptance to the university. However, the university informed me

that their student quota was met for science; the rejection made me feel as though I was not good enough to study science via the institution. Inasmuch as I tried to convince myself that not being accepted at UCT had nothing to do with my classification as 'coloured', it was difficult not to think this way because my life had (always) been subjected to apartheid legislation to the benefit of whites.

One way of interpreting my sense of 'not feeling good enough' is as a lack of self-confidence. Honneth (1995:xiv) refers to self-confidence as "the capacity to trust one's own sense of what one needs or wants". However, I knew and trusted that I wanted to pursue science; therefore, from Honneth's perspective, I did not lack the self-confidence to study science. Instead, 'not feeling good enough' has a greater correlation with Honneth's (1995:xv) response to a denial of the right to exercise one's capacity as a 'morally responsible agent'. Honneth (1995:xiv) continues that denying someone the right to be a morally responsible agent means denying someone a right to challenge their claims, and a form of disrespect. Being accorded the same entitlements as everyone else is what he articulates as developing one's self-respect. Through an interpretivist lens, my feeling of not being good enough can be seen as a feeling of institutional disrespect, as a consequence to my lacking the tools to trust in myself – concealed in the denial of my right to challenge the university's quota for science – impeding my belief in my potentiality as a scientist.

Carmen revealed an alternative interpretation of her non-acceptance at UCT. She unexpectedly failed mathematics in her final matric examinations – she had never failed a school subject before, wrote a supplementary examination, and passed. While she initially had provisional acceptance at UCT by the end of her matric year, Carmen interpreted the university's changed decision as a result of the apartheid government's intervention to implement punitive measures towards her family as anti-apartheid political activists and, therefore, deliberately failed her at mathematics. Carmen sought alternative tertiary education at South African Committee for Higher Education (SACHED), which gave her full access to resources at UCT. Her political awareness and politicised socialisation has synergy with Chisholm's (1991: 21) view of the influence of a middle-class intelligentsia during apartheid, who gave "rigorous, strenuous attention [to] the education of politics, and the politics of education" to young people, like Carmen. Her family was able to support her as she took the risk of alternative tertiary education. Taylor (1998: 33) offers insight into the meaning of identity as "the background against which our […] opinions and aspirations make sense". To Carmen, her background of opinions and aspirations were influenced by family – they fulfilled her. She could focus on the things that mattered to her, made possible by a family she loved and trusted. Carmen is an example of a women who defied a categorisation of 'coloured' with a view of race as "an evil social construct". Instead, she turned to her close relations with her family, who could help

shape her potentiality. The experience of apartheid yielded close familial ties, to Carmen's advantage, and is in accordance with Taylor's (1998: 33) view that dialogical relationships should not define us but fulfil our becoming. Carmen's conscientisation of the evils of the construction of race, schooled by her politicised family and her family's support, provided an alternate avenue to pursue tertiary education, nurturing her potentiality.

7.6 MATHEMATICS AND MATHEMATICS EDUCATION

7.6.1 Professional knowledge for mathematics teaching

The distinctiveness of this study resides in the lived experiences of 'coloured' women as professional mathematics educators in higher education, and so, the situatedness of mathematics as a subject specialisation becomes relevant. A sharing of the lived experiences of 'coloured' women's becoming specialists of mathematics in education are windows of opportunity to the situatedness of teachers learning how to teach, and learning how to learn mathematics, following their segregated schooling and tertiary education in apartheid.

As an introduction to the importance of sharing lived experiences of subjects or disciplines, MacIntyre and Dunne (2002: 12) identify the compartmentalisation of subjects (at schools) and disciplines (at HEIs) as problematic. In the authors view, compartmentalisation of this sort portrays education as a composition of separate parts. Schools and HEIs, also compartmentalise themselves from the lived experiences of the personal lives of learners and students in their communities that have an impact on their experience of mathematics. Furthermore, the implication is that education experienced outside the fences of an educational building is not always viewed as contributing to the prescribed subject or discipline. This does not suggest that the subject or discipline has less significance. Instead, it means that the narrative a learner or student brings to an institution about their lived experience of a subject, like mathematics, may have the potential to add greater meaning to the subject or discipline itself. In a sense, mathematics does not function on its own – it requires a human connection to 'bring it to life'.

The idea that a narrative can contribute to learning and teaching mathematics may not be prominent in South Africa. Khuzwayo's (2005) research about the history of mathematics education during apartheid alludes to an internal conscientisation that, as a colonised people, there was an inherited fixed mindset – that plays like a recording in one's mind – reiterating messages of incapabilities in mathematics. While fixed mindsets, such as 'maths is not for me' and 'I can't do maths', are not restricted to South Africa, and has seen an increase in interest in the last decade to foster growth mindsets (Boaler, 2013; Boaler & Selling, 2017); nonetheless, fixed mindsets were prominent in apartheid and, as Adler and Davis (2006: 276) report, continued to be so ten years into a democracy

in South Africa. It appears, therefore, that, in general, there is entrapment in the mind of a conceptualised mathematics that requires a reconscientisation – almost a 'rewiring' of the mind – that acknowledges possibilities and value in continuous learning (and teaching) mathematics. While most of the participants 'fell into' roles as professional mathematics educators in the absence of a professional path to higher education, their flexibility and ability to adjust from teaching learners to teaching teachers is, in itself, evidence of their growth mindsets.

In this study, Bernita is the only participant who is a vertical discourse enthusiast. She expressed mathematics as objective and binary – either "right or wrong" and, while she believed that there might be different ways of finding an answer, ultimately, there remained only one correct answer. She identified herself as a mathematician who taught undergraduate students mathematics, and not a mathematics educator. Bernita is an example of a supporter of Western philosophies of mathematics who have absolutist views of the content of mathematics. During the research interview process, Bernita was open about her binary view of life: right and wrong, black and white; there was no 'grey' in her life. It appeared that either she had consumed the identity of mathematics or she had a passion for mathematics as a consequence to her binary perspective of life. Following institutional restructuring, the mathematics department staff were relocated as support staff to departments such as business, education and engineering, Bernita described the experience as a stripping of her identity as a mathematician. She felt displaced, dislodged and was lost to the HEI after more than 20 years of loyalty to the institution. Bernita is an example of a professional mathematics educator whose preferred knowledge structure was not taken into consideration in the restructuring of an HEI. She sought alternate employment that involved identifying gaps in mathematical content at undergraduate level – evidence that she chose to remain in the vertical discourse of mathematics and, ultimately, sustain a Balkanisation of mathematics as a pure science. This is no fault of Bernita. Instead, it highlights a HEI's structural conditions that perpetuated pure mathematics, and influenced her understanding of mathematics. In a sense, she resisted the stereotypes of 'coloured' women by embracing Western philosophy of mathematics. She did not know that both her embraced philosophy of mathematics and the stereotypes of 'coloured' women in South Africa were seeded by the colonial powers of the West.

As will be shown next, on the receiving end of a 'grammar' of mathematics in education, the six remaining women's participation in newly introduced professional qualifications, as the tide turned to a democracy, was pivotal in their understanding of mathematics as a specialist subject in education. Adler and Davis (2006: 2002) made an important point that unlike nursing for example, where mathematics shapes nursing practice, mathematics for teaching is different because teachers are "trying to teach *mathematics* (their emphasis)" not teaching something else like nursing. The

data in this study did not reveal *mathematics for teaching* but, turned out to reveal *how* mathematics for teaching was made possible. In my view, the *how* of mathematics for teaching resonates with Davis, Adler and Parker (2007: 35) tensions between subject content knowledge and pedagogical content knowledge, and knowing and doing.

The participants revealed experiences of constructivism in mathematics education, merging theory to practice, problem-solving approaches, classroom-based research, the inclusion of thinking skills and process skills in a mathematics curriculum, planning for all learners, knowledge of progression and conceptual development, and inquiry-based learning. An important point to note is that their 'teachers-as-learners' experiences, highlight "strong, though different images of mathematics teaching" (Davis *et al.*, 2007: 37). To begin with, Aisha's experience of Christian National Education and fundamental pedagogics at college had not prepared her to teach mathematics with the learners' learning in mind or to think of resources that would facilitate the learners' thinking in mathematics, even though she knew the mathematics curriculum well and had "studied every mathematics textbook she could find at college". However, it was only when she was introduced to constructivism in mathematics education while engaging in a professional qualification at an HEI that she began her journey of a new 'coming to know' (Lerman, 1989: 216). An introduction to learning theories during a professional qualification in mathematics education course, the Further Diploma in Education (FDE), was a stepping-stone in her career as a primary school mathematics specialist. For the first time, Aisha could merge theory with practice and demonstrate what she had learnt at workshops to teachers – the FDE served as a bridge between college qualifications and academic qualifications, creating an avenue for her completion of a Master of Education in Mathematics Education.

Carmen studied undergraduate mathematics while reskilling as a secondary school mathematics teacher. A distance-learning undergraduate qualification in mathematics meant that she spent hours gaining knowledge of mathematics on her own, but she also sought a professional qualification to gain the skill to teach mathematics. University mathematics and an FDE qualification was the beginning of her route towards a Master of Education in Mathematics Education. Carmen's course involved trying out new ideas learnt at the course while also reporting on her findings. The experience exposed her to classroom-based research in mathematics education. Like Aisha, the FDE qualification served as a catalyst to a role as professional mathematics educators.

While I completed an undergraduate degree in mathematics and a Higher Diploma in Education (HDE), my experience of mathematics as a specialist subject occurred during an in-service Graduate Teacher Programme (GTP) in the United Kingdom, equivalent to a Postgraduate

Certificate in Education (PGCE). While the national curriculum for mathematics was prescriptive, the sequence of teaching-learning objectives and the time spent on each learning objective were not restricted. This meant that by knowing where the learners were at in mathematics, I could decide what to teach, and I had the liberty to create my own sequencing of lessons. For example, when I taught learners to solve quadratics, I taught quadratics alongside finding the roots of a parabola to facilitate the learners' sense-making of the mathematics (merging algebra and quadratic functions). The GTP coincided with participating in the Cognitive Acceleration in Mathematics Education (CAME) project, which opened my eyes to thinking and learning mathematics. The activities in the CAME project changed my teaching from looking for exercises in a textbook to searching for activities that required a deeper level of cognition. An additional turning point was an introduction to process skills in mathematics (such as reasoning, logic, evaluation, to be systematic, comparing, contrasting) that also changed my focus of relying on the prescribed content of the mathematics curriculum to finding ways that the learners knew and could articulate the process skills used during the mathematics activities. In other words, it felt like I became a specialist of mathematics when I understood that there was a depth to mathematics that required a conscientisation of thinking and process skills. A role as a teaching and learning mathematics advisor in secondary schools in the United Kingdom was pivotal to a career in professional mathematics education. I completed a Master in Arts with attention given to reflective learning of mathematics teachers.

Danah's specialisation of mathematics began when she questioned why her learners failed mathematics tests set by AMESA. The turning point in her career as a mathematics teacher was her involvement with Alwyn Olivier's problem-solving courses. Her learners began to talk about mathematics, share their thinking and consider their own strategies to solving problems. Subsequently, her learners' test marks improved, and she was invited to be part of the group that set the AMESA tests, giving her insight into the progression of learning mathematics and conceptual development. Danah accounts her specialisation in mathematics to professional courses about problem-solving approaches, constructivism in mathematics education and inquiry-based approaches to learning mathematics.

Once I was clear about the participants' gaze of *how* mathematics for teaching was made possible, I drew on a framework used by Davis *et al.* (2007: 38) to code the foci the participants chose to share concerning turning points in their careers as teachers, which drew them closer to mathematics education.

Table 7.1 below represents the four categorisations. **M** represented a focus on mathematics, **T** a focus on teaching, **m** or **t** represented background knowledge to mathematics and teaching. Notably, 'merging theory to practice' is in categories **m** and **t** to denote specialised theory in mathematics and specialised theory in teaching.

Table 7.1: Four categorisations specialised content and/or pedagogical knowledge

M	**m**
• gaps in content at school • process skills (reasoning, logic, evaluation as examples)	• classroom-based research • problem-solving approaches • constructivism in mathematics education • conceptual development • inquiry-based learning • merging theory with practice
T	**t**
• thinking skills	• merging theory to practice • knowledge of progression

The table shows that classroom-based research, problem-solving approaches, constructivism in mathematics education, conceptual development, inquiry-based learning and merging mathematics education theory with practice as background knowledge of mathematics are pre-requisites to careers in professional mathematics education. Furthermore, merging educational theories and generic knowledge of progression in teaching and learning were identified as background knowledge of teaching. Focus areas in mathematics included content gaps and process skills and a focus area in teaching was a depth of understanding of thinking skills.

None of the participants' attention focused on mathematical content in their professional journeys. One reason could be that they assumed that since the discussion was about mathematics, the content of mathematics was obvious. A second reason could be that their qualifications in mathematics were sufficient for teaching mathematics. A third reason could be that since they were speaking to the researcher of this study who is also a professional mathematics educator, the content of mathematics was obvious. However, herein lies an assumption that when speaking about the teaching and learning of mathematics, it is assumed that the content is known. This can be concerning. The assumption I made to overcome my concern was since we had not delved into mathematics content itself during this research, content was not brought to the fore other than in

Bernita's case who identified gaps in the secondary school curriculum to study mathematics at university level. The remaining indicators are insightful but beyond the scope of this study.

7.6.2 Reflections on repurposing professional mathematics education

It was only through my work as a professional mathematics educator, working with teachers from impoverished communities in South Africa, that I realised the importance of differences in teaching and learning contexts, both concerning how external environments affect teaching and how it affects learning. Asking teachers to reflect on what they learnt about the course and what they learnt about themselves during the course was revealing. My experience of deconstructing mathematical questions into conceptual components was no longer useful and, it felt like there was a pre-requisite to knowledge for teaching mathematics. Whatever was missing, I had not been taught at university. It lacked proficiency in the medium of instruction, aspects of subject content knowledge and pedagogical content knowledge (Ball *et al.*, 2008; Shulman, 1986) – little of which I had been taught throughout my tertiary education. Instead, I was learning how to teach mathematics to teachers who were also teaching learners in contexts of disadvantaged communities. In a sense, I was using a horizontal discourse of mathematics education to disrupt a vertical discourse of mathematics, which I believed had mainly been accessible to whites during apartheid.

MacIntyre and Dunne (2002: 2) refer to a good education as "one in which students learn not only how to play their intended part in different kinds of complex activity by developing their skills, but also how to recognise the goods served by those activities, goods which give point and purpose to what they do". The context within which the participants studied mathematics was at a time when there was opposition to the apartheid regime. MacIntyre and Dunne (2002: 2) asked a pertinent question about what is to be done when we realise that the activities we engage in do not necessarily serve the common goods of the family and local political community. The transformation from my 'good' to a 'common good' was the realisation that my ability to do mathematics could be beneficial to many others if I changed my focus on mathematics to teaching and learning of mathematics. Furthermore, this realisation only occurred when I began to work with teachers who required upskilling following their non-specialisation of mathematics during their college years. I realised that my decision to participate in professional mathematics education was driven by a narrative of my own marginalisation, and struggle to find strategies for my own professional development both in apartheid and in post-apartheid South Africa. Deconstructing mathematics, focusing on conceptual development and using different strategies to find answers was what I used to empower others who had also been marginalised.

As a secondary school learner, Anoushka's lived experience of preferential treatment towards higher grade learners in her mathematics lesson seeded a frustration in her that she attributed to inequality. Being involved in a two-year mathematics programme working alongside peers in an under-resourced township, generated further ideas of inequality. When asked why she chose to pursue teaching mathematics, she articulated that she enjoyed delving into a problem and applying her mind to draw on different strategies to find an answer – she would, at times, begin with the answer and work backwards better to understand the sequencing of the steps to a solution. Merging her narrative to the subject of mathematics, and her pursuit of a career as a professional mathematics educator, it became apparent to me that she not only rekindled her love of mathematics at college but was 'living' a purpose for mathematics to overcome inequalities brought to her attention through her experience of inequality in the delivery of mathematics at school. She found a purpose for teaching mathematics. MacIntyre and Dunne (2002: 10) described the kinds of experiences as having a "sense of some overarching *human* good". This study, therefore, evolved to a sharing of the lived experiences of the 'holders' of mathematics and mathematics education who had been marginalised. Professional mathematics education was a way for participants to empower teachers in mathematics as a political response to a segregated and hierarchical education towards marginalised groups. As Carmen noted, to be a teacher meant to have a social conscience.

7.6.3 Academia's blind-eye to 'coloured' women

After ten years into a democracy, Danah's experience of inquiring about a career in academia illuminated that norms and practices of dissuading 'coloured' women from employment at HEIs had not changed. During apartheid, she would not have met racialised criteria to enrol as a student or be employed at most universities as university spaces were geared towards whites. Post-apartheid, Danah approached a university about her prospects of pursuing academia. She thought that in a young democracy, at an institution undergoing transformation, she would be encouraged and supported to be part of the academy. Regardless of historical injustices, Danah did not get a sense that these injustices were acknowledged post-apartheid. Instead, she was held to the same standards as those who had benefitted from apartheid.

Danah had the ability to be an academic. The new democracy had granted her the opportunity to pursue university qualifications, otherwise unlikely during apartheid and, she pursued the opportunity to doctoral level. However, she did not feel that the HEI itself proactively encouraged her to pursue a career in academia, despite sharing her interest with them. In other words, the injustice she felt post-apartheid was that there was no recognition of the harm of apartheid towards 'coloured' women, like herself and the inequitable practices perpetuated.

Honneth (2007: 70) intimates in his writing that if, for a moment, we ignore our accolades and frills about who think we are and, if during an encounter with another, our "intuitive notion of justice seems violated", then the violation is in response to a social disrespect. It is this social disrespect that he affirms as a moral injustice. To Honneth (1995: 131), an injustice extends beyond behaviours of physical abuse and restrictions to freedom. In his view, an injustice is also prevalent when behaviours wound one's positive understanding of oneself – a moral injustice. Danah felt defenceless and at the mercy of an HEI that had the power to decide who were privy to their university spaces under the leadership of an apartheid government. Since Danah was not white, she was not rendered suitable for the academy. In the same breath, 'coloured' was also a separate classification to blacks; hence, 'coloureds' did not experience the same level of oppression and exclusion as blacks. Post-apartheid, racial categorisations remained and, often, employment equity was couched concerning blacks and not necessarily 'coloured', promulgating further moral injustices of insecurities of one's worth on personal and professional levels.

For some South Africans, a career path into higher education is straightforward. While Bernita began her career at an HEI, albeit at a university created for 'coloureds', the remaining six 'coloured' women entered careers in higher education via alternate pathways; either as research participants in mathematics education projects or as support staff to mathematics education programmes run by universities. By 2019, at the time of the interviews, two of the seven women had been employed full-time in HEIs; the rest remained support staff. Fraser (2008b: 38) suggests that it is not sufficient to consider causal and historical explanations of injustices because there will always be a multitude of alternative social and historical understandings of unjust harms. Instead, Fraser (2008b: 41) posits a 'how' of justice as more pertinent as an avenue to change unjust harms. Concerning this study, to be employed part-time or as support staff twenty-five years into a democracy requires reflexivity that extends beyond the causal and historical effects of apartheid. To Fraser, studying the 'how' of justice provides insight into changing the institutional norms and practises that rejected 'coloured' women in the first place. None of the seven women was asked to voice their lived experiences of the barriers they needed to overcome with a label of 'coloured' during apartheid, and in a democracy by anyone (or any institution).

From Fraser's (2000: 113) perspective, if we begin a conversation about the recognition from a stance of justice, then we should speak of "parity in participation". This is not to say that justice does not include the recognition of individuals. Instead, justice means recognising that every individual is capable of participating on the same level as any other individual. In other words, regulations propagated by HEIs are the 'real' injustices and require interrogation. Perhaps, Fraser (2008b: 38) is right when she proposes a "critical-democratic' approach to justice that allows for the

'coloured' women in this study to contest their challenges and barriers to parity participation in HEIs in a democracy.

7.7 (RE)CREATING A PURPOSE FOR RACE

While the democratic government foregrounds a non-racial constitution, the reality for South Africans, such as the participants in this study, is that race categorisations continue to be used as indicators of privilege and less privilege to redress the past inequalities. Instead of the new government taking the opportunity to conscientise society about the harms of race to accumulate wealth for those in power during apartheid, more than two decades into a democracy, race is used as a means to remediate inequality, re-creating a 'new' purpose for race and turning a blind eye to individual's potentiality. Soudien (2013: 16) refers to the justification of using race as ammunition to fight racism as 'redemptive realism' – a positive concept of race to compensate for the negative representation of particular races.

While this approach may be useful for the subaltern, the lived experiences of Carmen reveal that HEI employers go into detail to choose an employee for equity and redress – for example, not only do they have a preference for a black female but, more specifically, a black African female and so, the criteria of marginalisation centres around an empty concept, creating further marginalisation. While redemptive realism is a mechanism for those previously marginalised to have a voice, and to be heard, the voice of black women should not be heard at the expense of 'coloured' women (and vice versa) as racial identifications separate women of colour in the same ways as apartheid separated 'coloured', black and Indian women. By placing the responsibility of self-categorisation onto individuals, a vicious cycle of racism perpetuates itself by the individuals themselves, re-creating racialised otherings. Being an 'other' affects us – it affects who we think we are as *the* 'other' or concerning an 'other'.

According to Soudien (2015, 2016), there is a spectrum of humanity outside the centrepiece of race that strives for human dignity, which he believes, is achievable by a re-schooling of the individual's (racialised) mind to a level of consciousness that deliberately disregards the conceptualisation of a racial 'other' that focuses on achieving potential. Aisha's lived experience illuminates that the re-schooling of racialised minds has not occurred in HEIs. Aisha felt subordinated as a professional educator when the head of the department reprimanded her over complaints of her mannerisms in the classroom. She felt unable to defend herself because the students never approached her with grievances. They complained directly to the head of the department who would not disclose the complaints or complainants as both remained anonymous. Inasmuch as Aisha tried to enjoy her passion for teaching mathematics, it was daily micro aggressions such as awkward moments of

silence from white students in response to her humour, that gnawed at her – to be humorous was part of her teaching style that the rest of the class enjoyed very much. There is a part of Aisha's experience that resonates with Bernal and Villalpando's (2002: 176) conceptualisation of a Eurocentric epistemology, a view that *all* people, independent of their different lived experiences, achieve what they deserve. Furthermore, their achievements are based on the efforts they put into it (meritocracy). Relaying the conceptualisation of meritocracy to an 'apartheid epistemology' in South Africa, implies that knowledge of 'coloured' women – with slandering connotations coupled to a view of white competence and 'coloured' (and black) incompetence during apartheid remained in racialised minds in a democracy. Moreover, any (lack of) achievements were based on what 'they' deserve(d). In other words, 'coloured' women deserved being viewed as slanderous and incompetent in a democracy. Therefore, from a CRT lens, an apartheid-driven epistemology at a predominantly white institution, misread and discredited 'coloured' women, like Aisha, by giving preference to (racist) majoritarian narratives, denying her the opportunity to defend herself, and normalising slander and incompetence of 'coloured' women amongst her students.

There is an additional aspect that comes to the fore which Bernal and Villalpando (2002: 169) refer to as 'epistemological racism' which asks questions about the 'holders' of legitimate knowledge (of 'coloured' women). The question I ask myself and others what it is about me qualifies me, without self-categorisation, as 'coloured' in a democratic South Africa? The most likely response I get from officials in South Africa is to be hushed and to tick the box that indicates 'coloured' on the form for equity – I am silenced. The second likely response is usually in humour – "No, you are not 'coloured', you are German", insinuating a European ancestry that disregards and disrespects my African and Asian heritage – I am mocked. The humour is usually followed by a swift change in topic so that I am unable to defend the intimation of white reminiscence. The third likely response tends to have a sexual connotation scorned with laughter – "Why do you feel in the middle? It's such a great feeling to be in the middle." – I am sexualised. The fourth response to questioning a label of 'coloured' that has meaning is an accusation of promoting essentialism – I am reprimanded. Therefore, through a lens of CRT, my lived experiences reveal that it is in the subtleties of dialogue, that 'coloured' women like myself are silenced, mocked, sexualised and reprimanded and, in those spaces of humiliation, there is a re-creation of a racialised identity.

Concerning education in a democratic South Africa, Carmen was of the view that "the country ha[d] not done enough to raise people's education". She believed that economic inequalities remained prevalent because "there isn't equality in education, so there will always be disparity". Anoushka, too, worked for a national institution that specifically requested racial categorisations with the purpose of redressing race-based economic inequalities as a consequence to apartheid. While she

felt that redress was necessary, she also witnessed an increase in economic inequalities compared to the apartheid era, particularly evident in the resources of (previously) disadvantaged 'coloured' and black schools she frequented during her employment as a professional mathematics educator. Perhaps then, redress and equity based on race is a farce and, as Carmen suggests, and Anoushka experienced, educational inequality is a better indicator of socioeconomic inequalities. Therefore, from a perspective of CRT, redress and equity require careful consideration because it may be creating a new form of racial discrimination because the indicators used are racialised and unhelpful.

7.8 CHAPTER SUMMARY

This chapter is the core of the research study. To being with, I made use of the themes of the findings in chapter 6 as a starting point to an analysis of the schooling, tertiary experiences and the seven participants' careers as mathematics educators in higher education. I described the methods of data analysis. The data were analysed through the lenses of interpretivism and phenomenology (in chapter 5) and Critical Race Theory (as discussed in chapter 2). Once I described the emerging themes, I reported on the analyses, drawing from the literature on 'coloured' women from chapter 3, and the key theorists of (mis)recognition: Charles Taylor (1989, 1998), Nancy Fraser (2000, 2008) and Axel Honneth (1995, 2007) from chapter 4.

The following chapter concludes the research study.

CHAPTER 8:
SUMMARY AND CONCLUSION

8.1 INTRODUCTION

The purpose of this study was to explore the lived experiences and identities of women classified as 'coloured' during apartheid who pursued roles as professional mathematics educators in post-apartheid South Africa. The seven participating 'coloured' women were by no means representative of all 'coloured' women. They may also not have identified with a label of 'coloured'; however, each agreed that the name created perceptions, biases and judgements, as well as hindrances and barriers. Unlike existing research on 'coloured' people or women, this study breaks the mould on the type of stereotypical and caricature discourse, which has thus far dominated understandings and expectations of 'coloured' women. This study is not only *about* the lived experiences of seven women; this research represents the voices, experiences and stories of a group of women as they navigated their way to being mathematics educators in higher education. In this regard, the study set out to focus on identity formation, recognition and education.

As a means of inviting these voices into the research, I decided to include my own story. Sharing our 'stories' was an opportunity to journey lived experiences of ordinary women subjected to an (il)legitimisation of a 'coloured' classification. It was also an opportunity to highlight the winding pathways to careers as mathematics educators – pathways, which in many respects, took race-based detours. As the seven women navigated their career journeys into higher education, they walked untrodden paths, with a determination to learn, motivated by the contributions they could make towards a common good of uplifting disadvantaged mathematics teachers in a democratic South Africa.

The lived experiences and identities of 'coloured' women as professional mathematics educators were determined and influenced from a young age before they understood the meaning of apartheid and the implications of the law. Racial segregation of public spaces, residential areas and schools limited the socialisation of the young women to mainly 'coloured' areas. On rare school occasions, the young women were permitted to interact across racial groups which, in most cases, created a hierarchy of racial othering. Seemingly, mathematics as a secondary school subject reflected similar otherings in that the higher grade learners received more attention and time than the standard grade learners. The division in mathematics left feelings of not belonging, and scarred their potential as mathematicians. For the majority of these women, tertiary education was limited to teaching, controlled by government bursaries and limiting their potentialities even further. There were no

professional pathways for 'coloured' women to pursue mathematics education in HEIs, and so, the women used their determination and capabilities to pave paths into higher education spaces. They used their knowledge, skills and teaching experience to empower other mathematics teachers as political and educational responses to a segregated and a hierarchical education system. Often, the women felt that they had been misrecognised at HEIs. In South Africa's democracy, they continued to feel segregated, mainly due to filtered employment criteria. Despite their hardships during apartheid and in a democracy, they continue to channel their support to disadvantaged teachers (and students) in mathematics education.

In this chapter, I share some personal reflections, summarise the key findings of the study, consider the implications of the findings for professional mathematics education in South Africa, make recommendations, and highlight the significance of the study.

8.2 PERSONAL REFLECTIONS OF 'COLOURED' WOMEN IN SOUTH AFRICA

Throughout this study, I was aware of the criticism, contestation and controversy surrounding 'coloured', which required a treading of social and political caution. Nevertheless, I was driven by the side of me that was consciously aware of the slandered and disparaged representation of women (and men) viewed through a lens of 'coloured'. I, too, had been guilty of discrimination towards my family, unaware that I had been reifying a narrative of 'coloured' that I had learnt through my socialisation up until secondary school. By then, my story was habitual, perpetuated by repeated challenges that my family faced by the effects of poverty. I had no knowledge that their experiences were consequences of political engineering of racial subordination with such fierce force that even I, who could be considered a reasonable human being, could be derailed off the track of being human by my ignorance of the magnitude of apartheid.

Whether 'coloured' as a racial marker is empty or real, used as a restorative or oppressive measure, the point is that its meanings were personified on a *continuum of slander*. To some, it had location – why else would one pose questions such as where do you live, where are your parents from, where did you grow up – as we (un)consciously dig deeper into someone's history until we find signals of whom we think you are. For others, it had an accent – why else would we listen with an attentive ear if we are unable to 'work it out'. To most, it had a 'look' – why else does hair texture, skin tone, cheekbones, nose and body shapes still matter. All these questions point to a need to know one's race.

The study interrogated the 'coloured' marker of race across three eras: colonialism, apartheid and democracy, and found that 'coloured' was and remains a mythical label in the same way Soudien (2013) described race as an empty concept. Across these periods, the discourse on 'coloured'

women was dominated by slander and a reduction to sexual objectification. The seven participants in this study were born into this particular construction of 'coloured' women, and have been remarkable – they achieved more than an apartheid regime had politically engineered for them. It didn't matter whether they identified with a label of 'coloured' during apartheid or post-apartheid. The point was that they were immersed into a perception of 'coloured' (un)knowingly, and it was up to them to 'swim upstream' and make something worthwhile of their lives. They did not want to be referred to as 'coloured' in a democracy as the label of 'coloured' had kept them suspended between white and black, and not acknowledged their contribution as worthy and capable to reach their potentiality in higher education spaces post-apartheid.

8.3 A SUMMARY OF THE KEY FINDINGS OF THIS RESEARCH STUDY

8.3.1 Schooling experiences of 'coloured' women during apartheid

The seven women in this study were born and schooled during apartheid and navigated their careers into higher education in post-apartheid South Africa. In terms of the schooling experiences, the study was able to elicit five key findings.

- Firstly, the seven women experienced the normalisation of segregation of people before they understood the meanings of apartheid. Ideas of human difference were conceptualised in public spaces, where signposts and government attendants ensured compliance to discriminatory municipal regulations.
- Secondly, apartheid legislation determined residential areas by racial classification. By the time the young girls were in primary school, they were living and socialising in areas allocated to 'coloureds'. By separating young people into white, 'coloured', black and Indian, the apartheid government created unknown others.
- Thirdly, because education was racially segregated, the young women could only attend schools designated to 'coloured' learners. It did not matter whether they lived in closer proximity to schools allocated to white learners. If there were no 'coloured' secondary schools in their home town, as was the case in rural areas, they had little choice but to separate from their parents and relocate to a different town.
- The fourth key finding was related to mathematics. Each of the young women learnt to have a passion for mathematics whether they were attracted to the absolutist aspects of mathematics or the problem-solving aspects. Seemingly, the way mathematics was taught reflected similar kinds of divisions and differentiated treatment the participants had experienced in their daily lives. The separation of mathematics into categories of higher and standard grades was based on academic performance and results. Even if learners wanted to continue with mathematics on the higher grade, they were not allowed to do so if their

results were not considered good enough. The separation in terms of grades (higher and standard) did not only mean the separation of learners but the separation of teaching. While the learners, who had made the cut for higher grade mathematics received more of the teachers' attention and time, those on the standard grade were often neglected – under the auspices that these learners would not perform well in any case.

- Fifthly, on some occasions, white and 'coloured' learners were permitted to participate in inter-school sporting events. Since schools were racially bound, these events became competitive sites between whites and 'coloureds'. White learners had the school's sports attire and equipment to compete while, often, their 'coloured' counterparts did not, leaving the 'coloured' learners with feelings of inferiority. On rare occasions when 'coloured' learners interacted with black learners, the young women noted fewer resources for black learners. Interactions across racialised groups of young people created a hierarchy of racial othering.

8.3.2 Tertiary education experiences

As 'coloured' women, there were limited opportunities for tertiary education. In this section, I highlight two features of entry into tertiary education.

- Firstly, tertiary education was mainly restricted to teaching (and nursing), controlled and made accessible by government bursaries. Of the seven women, three wanted to become teachers and obtained government bursaries to study at either a university or at a teacher training college. Unable to pursue tertiary education without funding, three more participants opted for teaching to secure a government bursary. Once the six women qualified as teachers, they either repaid the government or taught for the same number of years they had received the bursary. Any further education was either part-time or by correspondence, and self-funded.
- Secondly, the remaining participant had no intentions of pursuing a career in teaching. She obtained private funding to study mathematics at a university.

Another feature of tertiary education was that government bursaries provided entry to tertiary education but also impeded potentialities outside of careers in teaching.

8.3.3 Highlights and challenges of careers in mathematics education

After the women began their careers as mathematics teachers followed by mathematics education, two broad areas explicated highlights in their careers:

- Participating in workshops, being part of a mathematics education association taught by internationally recognised mathematics education experts while pursuing professional

mathematics education qualifications, and their involvement in classroom-based research served as turning points in their teaching careers – they valued the recognition of the contribution they could make to mathematics education.

- The participants channelled their capabilities in mathematics to empower teachers as political and educational responses to a segregated and a hierarchical education system. By merging narratives of their lives to other disadvantaged teachers, they found a purpose for mathematics.

The participants identified five challenges in pursuing careers in mathematics and mathematics education:

- The first challenge to a career in mathematics education was that there were no apparent career paths to professional mathematics education for 'coloured' women. The women found four different routes into mathematics teacher education:
    - Some funding streams for diploma qualifications had requirements of delivering workshops to in-service teachers of mathematics to help upskill teachers across the country. These workshops were managed by universities, placing the women under the management of an HEI.
    - A few universities offered diploma qualifications that sought teachers to participate in classroom-based research to help strengthen the requirements.
    - Publishers sought authors of textbooks for the first national mathematics curriculum. Identified as excellent mathematics teachers, publishers headhunted the women to write chapters in partnership with higher education institutions.
    - Studying and working abroad removed apartheid's race filters, opening new doors of possibility in mathematics teaching and mathematics education.
- A second challenge was that as the women worked in different higher education spaces, there was no uniformity in their job titles (lecturers, education specialists, facilitators, teacher educators, teacher trainer and academics) across higher education spaces. Employed in an environment with no consistent job title outside of being a lecturer or an academic in HEI signals a non-recognition of roles outside of these positions.
- A third challenge was that they felt at the mercy of HEIs who held to the same standards as those who had benefitted from apartheid legislation. Once in teaching, their roles as master and lead teachers in their teaching subjects were overlooked by universities – they were perceived as teachers of learners, not as teacher educators and, therefore, considered not as sufficiently experienced in adult education at the university level. Those teaching

mathematics at a tertiary level were pressured into increasing publications. Globalisation of higher education turned government and corporate funding to mathematics with the purpose of building the pipeline for STEM careers instead of mathematics teacher education, despite shortages of mathematics teachers in South Africa.

- A fourth challenge was that despite the country's transition to a democracy, race remains a determining factor in terms of access and opportunity in higher education spaces. During apartheid, the women were not white and were, therefore, deprived of certain rights and equal treatment. Democracy seemingly places a higher premium on black than it does on 'coloured' – thereby creating the same kinds of displacement for 'coloured' individuals as was the case during apartheid. The participants witnessed filtering employment criteria from black male to a black female, delving into discussions about whether black African was the same as African to redress equity in workplaces. Some of the women felt that their marginalisation in HEIs was ignored or overlooked, which they interpreted as turning a blind eye to their potentiality, (in)advertently alluding to a lack of potentiality.
- The fifth challenge was one of dialogue in higher education spaces. Often when they questioned a perception of a stereotyped 'coloured' identity in higher education spaces, they were silenced, mocked, sexualised and reprimanded. In these spaces of humiliation, a re-creation of racialised identities were sustained yielding strong messages of not-belonging.

8.3.4 'Coloured' identities

Lived experiences of racialised segregation and discrimination influenced the identities of the participants. Following are five ways in which 'coloured' identities were constructed and ways in which the participants responded to these constructions:

- In the first instance, public spaces and separate schools were sites where racialised hierarchical othering and inequalities created a demeaning image of themselves, which made the young women question their worth. While societal imaging were confusing and painful, they turned to what was in their control – their capabilities. Not all the young women questioned their sense of worth. The families of these participants demonstrated absurdities in apartheid legislation by, at times, breaking laws of segregation in public spaces. In this regard, the image that their parents revealed of themselves was that they had equal rights to their white counterparts. However, occupying public spaces reserved for whites is insufficient for supporting young 'coloured' women in their identity construction. In other words, demonstrating equal dignity is not sufficient for identity construction.
- In the second instance, during inter-school events across racialised groups, playing fields between white and 'coloured' learners were not level as there were no common grounds to

judge standards of either their passion for athletics or science competitions. Feelings of inferiority crept into the minds of the young 'coloured' women. Instead of internalising these feelings, some of the young women found strength in their 'coloured' school peers' recognition of their capabilities and pursued their passion into adulthood. For others, it required winning white counterparts to build their self-esteem.

- In the third instance, separation and segregation in mathematics lessons mirrored hierarchical othering which, for some participants, temporarily turned them away from mathematics. This experience of othering contributed to feelings of not belonging to a higher status of mathematics and thwarted their identities as potential mathematicians. For these women, the might of Western philosophy of mathematics turned them away but they found a strength to persevere, and enter higher education spaces.
- In the fourth instance, those participants who pursued teaching as a means to obtain a government bursary as a stepping-stone into tertiary education were, in some ways, denied their authenticity of pursuing their childhood dreams. Once they were in the education system, they did not return to these childhood dreams. They were not aware of the social construction of 'coloured' to oppress and politically manipulate. The apartheid government prescribed their identities as 'coloured' women to meet the needs of the state – 'coloured' women pursuing tertiary studies were shaped to teach 'coloured' learners in 'coloured' communities to continue the cycle of apartheid. Yet, the women in this study wanted more. Their determination to pursue further education enabled them to fight back, and they broke free from the mould enforced by the apartheid regime.
- In the fifth instance, HEIs which were mainly for white students, misrecognised 'coloured' women. These institutions did not take into consideration their capabilities as potential students at universities; instead, they denied them access based on race, impeding their potentiality. Denial into universities ruptured their sense of self-respect and self-esteem as they were unable to challenge the decisions of government-influenced institutions. However, some found alternatives either through a tertiary education at SACHED, which nurtured their identities as human beings as opposed to racial beings. These opportunities were rare and only known to families whom themselves were politicised and educated with human and social consciousness in mind, and brings to light the power of education and the need for a politicised education.

8.4 IMPLICATIONS OF MY FINDINGS

In this section, I elaborate on the implications of my findings:

- Firstly, for the possibility of identity construction in schools, all learners are recognised for the authenticity that they bring to a shared educational space. It does not mean identifying what is unique about each learner *per se*. Instead, it means teachers are probing learners to think about their distinctiveness as human beings. In this regard, authenticity is not an achievement celebrated at certification events but a particularised recognition that signals *being true to myself and my way of being*.
- Secondly, socialisation of all learners, whether previously marginalised or not, is essential to learners' identity construction at school. In the absence of socialisation, the legacy of apartheid's hierarchical othering breeds racism, which cannot be left for learners to work out on their own. Of importance is that when playing fields are not level between learners (as may be the case during competitions), it creates crevices for learners' capabilities to be overlooked, and their self-esteem diminished.
- Thirdly, to reflect on mathematics, in particular, in the context of this study is to reflect on belonging. There is value in being passionate about mathematics because you are drawn to its essence; however, how do you dream 'big' if you are unaware of what is possible and what is yet to be solved in mathematics? The knowledge *of* teaching mathematics is essential but not knowing *about* mathematics and the influences of Western philosophy, messages a not belonging to the expansive and expanding field of mathematics.
- Fourthly, recognition of students in higher education spaces places responsibility for institutions to question their historical norms and practices. When a student has the academic standard for enrolment at an institution, but their racial categorisation determines their acceptance, then the institution has not changed its *culture of racial preference*. What is required is the consideration of parity in participation based on capabilities and a desire to pursue a career, not on race.
- Fifthly, there is scope for competencies in professional mathematics education that include a profoundly moral and social conscientisation of mathematics, to give a purpose to mathematics as a tool for empowerment. Competencies may not be possible without knowledge of vertical, horizontal structures of mathematics and knowledge for teaching mathematics. Competencies also need to include an understanding of other horizontal structures in mathematics to advise teachers about the application of mathematics.

8.5 SIGNIFICANCE OF THIS STUDY

My motivation for this study stemmed from the complexities I experienced as I navigated my way into professional mathematics education. There is a shortage in the literature of women of colour with a particular classification of 'coloured', employed in professional mathematics education.

Therefore, this study makes an authentic and empirical contribution of 'coloured' women voicing their unshared lived experiences in South Africa. The study is significant because it takes a new view of 'coloured' women as professional mathematics educators in contrast to the stereotypical sexualised slander written of 'coloured' women.

The study revealed that, in South Africa, apartheid legislation engineered the construction of a 'coloured' identity. It didn't matter whether they were born to politicised and educated middle-class families or were part of the working-classes, with a 'coloured' classification they were subjected to apartheid legislation, and expected to comply with the laws. Failure to do so had consequences that ranged from being ordered to leave public spaces reserved for whites to the imprisonment of family members with detrimental effects. Separate residential areas, schooling and socialisation, engineered a racialised hierarchy of othering and so, segregation became a way of life. Perpetual othering nurtured racialised identities, one of which was a 'coloured' identity.

Despite the political engineering of the apartheid project, the young women demonstrated their defiance by turning toward to their capabilities at school. Their challenges continued into their tertiary education with limited choices and, while some of the women wanted to be teachers, and others preferred not to be, their futures were predetermined through the control of government bursaries. Those who were fortunate to obtain private funding could not necessarily enrol at universities or courses designated to whites. The seven women were headstrong and determined to succeed in their careers, paving their ways into professional mathematics education in higher education spaces, and making concerted efforts to give back to disadvantaged teachers, students and learners. This study changes the narrative of 'coloured' women in the academy to women who are passionate about teaching and learning mathematics. They are not unique – merely the first 'coloured' women with the opportunity to share their narratives as professionals.

8.6 RECOMMENDATIONS FOR FURTHER STUDY

There are three recommendations for further study:

- Apartheid strongly influenced the personal lives of the participants in this study. However, the magnitude of the findings in this study exceeded the scope of this study. There remains an absence in the literature about the lived experiences of the effects of apartheid on personal lives as 'coloured' women who journeyed careers into professional mathematics education.
- CRT has an underdeveloped framework in professional teacher education. In the previous section, I began the process of formulating a framework by considering the selection criteria in higher education for professional teacher education, consideration for the *how* of justice

in higher education spaces via parity in participation, and dealing with subtle racist dialogue in higher education spaces. I hope that a framework of CRT can be formulated for professional mathematics educators to penetrate the wall that is preventing people of colour into mathematics and mathematics education in higher education.

- To explore further how mathematics education can open up an avenue of resistance to the stigmatisation of race so that difference can be imagined differently. Outside the oppressive forces of race, class and gender, this study found commonality in a passion to 'do' mathematics and to teach the 'doing' thereof. One alternative is to open debate about the content of mathematics taught in higher education spaces. (Should HEIs continue to drive Western ideas of mathematics?). A second alternative is to challenge the content of mathematics education and who decides on the content to be taught at higher education level and in schools.

8.7 LIMITATIONS OF THE STUDY

There were three broad limitations to this study.

- An important consideration for the study was the extent to which the women chose to reveal their private and professional lives. Some wanted to be part of the study, while others decided to defer because they interpreted studies of 'coloured' women as essentialist.
- The primary data was constructed from a small-scale sample of seven 'coloured' women. There were a small number of participants because of the low numbers of the particular women exercising roles as professional mathematics educators in higher education in the Western Cape, South Africa.
- The use of 'coloured', as a particular classification during apartheid comes with its critique; however, I could not deny that the women, like me, existed – our stories needed to be told as alternatives to the stereotypical narratives of 'coloured' women.

8.8 CONCLUSION

This study was a first of its kind to explore the lived experiences and identities of 'coloured' women who are contributing to the spaces of higher education. Instead of exposing 'coloured' women's vulnerabilities in their communities or adding to racialised and gendered stereotypes, this study added value to the literature of 'coloured' women as professional mathematics educators in South Africa. While I began this study as a silenced professional mathematics educator, this research journey has made me realise that my silences were a mesh of questioning my worth, a frustration of restrictions to my becoming, and the hardship of finding my own way into a career that could

benefit others. I know now that just like all the other women in this study, we are worthy, we are capable, and we have potential.

8.9 CONCLUDING REMARKS

I conclude this study with the wisdom of Goldberg (2009a: 226) that I referred to in Chapter 2. He articulates that racial knowledge "consists of *ex hypothesi;* it is in a sense, and paradoxically the assumption and paradigmatic establishment of difference" – whoever is the author of the proposed hypothesis of human difference is removing the self-construction of knowledge of the other, assuming that the author knows what is best for the other. I hope that through the 'un-silencing' and voicing of the incredible and remarkable journeys of the women in this study, other women may also find the strength and courage to author *their* stories.

REFERENCES

Adams, A. 2014. The construction of intimacy in heterosexual, longterm relationships in a South African farmworker community. Unpublished PhD dissertation, Stellenbosch University, Stellenbosch.

Adhikari, M. 1986. Teachers' League of South Africa 1913-40. *University of Cape Town*. [https://open.uct.ac.za/bitstream/handle/11427/22519/thesis_hum_1986_adhikari_mohamed.pdf?sequence=1]. 26 July 2020.

Adhikari, M. 1994. Coloured identity and the politics of coloured education: The origin of the Teachers' League of South Africa. *International Journal of African Historical Studies,* 27(1): 101-126.

Adhikari, M. 2006. Hope, fear, shame, frustration: Continuity and change in the expression of coloured identity in white supremacist South Africa, 1910-1994. *Journal of Southern African Studies,* 32(3): 467-487.

Adhikari, M. 2008. From narratives of miscegenation to post-modernist re-imagining: Toward a historiography of coloured identity in South Africa. *African Historical Review,* 40(1): 77-100.

Adhikari, M. 2012. *Against the current: A biography of Harold Cressy, 1889–1916*. Cape Town: Juta.

Adler, J. 2005. Mathematics for teaching: What is it and why is it important that we talk about it? *Pythagoras,* (62): 2-11.

Adler, J. 2017. Mathematics in mathematics education. *South African Journal of Science,* 113(3): 1-3.

Adler, J & Davis, Z. 2006. Opening another black box: Researching mathematics for teaching in mathematics teacher education. *Journal for Research in Mathematics Education,* 37(4): 270-296.

Adler, J, Davis, Z, Kazima, M, Parker, D & Webb, L. 2005. Working with learners' mathematics: Exploring a key element of mathematical knowledge for teaching. *Proceedings of the 29th Conference of the International Group for the Psychology of Mathematics Education.* Melbourne, Australia. 10-15 July.

Alexander, N. 1993. *Some are more equal than others - Essays on the transition in South Africa*. Cape Town: Buchu Books.

Anderson, GM. 2003. Racial identity, the apartheid state, and the limits of political mobilization

and democratic reform in South Africa: The case of the University of the Western Cape. *Identity,* 3(1): 29-52.

Ansell, AE. 2006. Casting a blind eye: The ironic consequences of color-blindness in South Africa and the United States. *Critical Sociology,* 32(2–3): 333-356.

Appiah, KA. 2005. *The ethics of identity*. New Jersey: Princeton University Press.

Appiah, KA. 2009. Racial identity and racial identification. In L Back & J Solomos (eds.). *Theories of race and racism: A reader,* Second edition: Oxon and New York: Routledge: 669-677.

Appiah, KA. 2015. Race in the modern world: The problem of the color line. *Foreign Affairs,* 94(2): 1-8.

Babbie, E & Mouton, J. 2001. *The practice of social research*. Cape Town: Oxford University Press Southern Africa.

Bagilhole, B & White, K (eds.). 2013. *Generation and gender in academia*. Londen: Palgrave MacMillan.

Ball, DL, Hill, HC & Bass, H. 2005. Knowing mathematics for teaching - Who knows mathematics well enough to teach third grade, and how can we decide? *American Educator,* 29(1): 14-22.

Ball, LD, Thames, MH & Phelps, G. 2008. Content knowledge for teaching: What makes it special? *Journal of Teacher Education,* 59(5): 389-407.

Bass, O, Erwin, K, Kinners, A & Maré, G. 2012. The possibilities of researching non-racialism: Reflections on racialism in South Africa. *Politikon,* 39(1): 29-40.

Baxter, P & Jack, S. 2008. Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report,* 13(4): 544-559.

Berger, R. 2015. Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research,* 15(2): 219-234.

Bernal, DD & Villalpando, O. 2002. An apartheid of knowledge in academia: The struggle over the "legitimate" knowledge of faculty of color. *Equity and Excellence in Education,* 35(2): 169-180.

Bernstein, B. 2000. Vertical and horizontal discourse - An essay. In L Boulder, *Pedagogy, Symbolic Control and Identity - Theory, Research, Critique,* revised edition: New York: Rowman and Littlefield Publishers: 155-174.

Berry, TR. & Mizelle, ND (eds.). 2006. *From oppression to grace - Women of colour and their dilemmas in the academy*. Stirling, Virginia: Stylus Publishing, LLC.

Berry, TR & Candis, MR. 2013. Cultural identity and education: A critical race perspective. *Educational Foundations,* 27(3–4): 43-64.

Besten, M. 2009. "We are the original inhabitants of this land": Khoe-San identity in post-apartheid South Africa. In M Adhikari (ed.), *Burdened by race, coloured identities in Southern Africa.* Cape Town: UCT Press: 134-155.

Bickford-Smith, V. 2001. Mapping Cape Town: From slavery to apartheid. In S Field (ed.), *Lost communities, living memories: Remembering forced removals in Cape Town*. Cape Town: Centre for popular memory, University of Cape Town: 15-26.

Biraimah, KL 2016. Moving beyond a destructive past to a decolonised and inclusive future: The role of ubuntu-style education in providing culturally relevant pedagogy for Namibia. *International Review of Education,* 62(1): 45-62.

Boaler, J. 2013. Ability and mathematics: The mindset revolution that is reshaping education. *FORUM,* 55(1): 143-152.

Boaler, J & Selling, SK. 2017. Psychological imprisonment or intellectual freedom? A longitudinal study of contrasting school mathematics approaches and their impact on adults' lives. *Journal for Research in Mathematics Education,* 48(1): 78-105.

Du Bois, WEB. 2009. The conservation of races. In L Back & J Solomos (eds.). *Theories of race and racism: A reader,* Second ed. London and New York: Routledge Taylor & Francis Group: 104-111.

Bowers Du Toit, NF. 2014. Gangsterism on the Cape Flats: A challenge to 'engage the powers'. *HTS Teologiese Studies/Theological Studies,* 70(3).

Bowler, D. 2016. Opinion: Coloured people constantly reduced to tired stereotypes. *Eyewitness News* (Johannesburg). [http://ewn.co.za/2016/02/01/OPINION-Danielle-Bowler-Coloured-people-are-constantly-reduced-to-tired-stereotypes]. 26 July 2020.

Breckenridge, K. 2014. The book of life: The South African population register and the invention of racial descent, 1950-1980. *Kronos,* 40: 225-240.

Brown, RA & Armelagos, GJ. 2001. Apportionment of racial diversity: A review. *Evolutionary Anthropology,* 10(1): 34-40.

Brubaker, R & Cooper, F. 2000. Beyond "identity". *Theory and Society*, 29(1): 1-47.

Bryman, A. 2008. *Social research methods*, Third edition. Oxford and New York: Oxford University Press.

Buchanan, K & Hurwitz, N. 1950. The "coloured" community in the Union of South Africa.

American Geographical Review, 40(3): 397-414.

Bunting, B. 1969. *The rise of the South African reich*. n.p.: Penguin books.

Chang, H. 2013. Individual and collaborative autoethnography as method. In S Holman Jones, TE Adams & C Ellis (eds.). *Handbook of autoethnography*. London and New York: Routledge Taylor & Francis Group: 107-122.

Chisholm, L. 1991. Education, politics and organisation - The educational traditions and legacies of the Non-European Unity Movement, 1943 - 1986*. *Transformation,* 15: 1-24.

Christian, M. 2005. The politics of black presence in Britain and black male exclusion in the British education system. *Journal of Black Studies,* 35(3): 327-346.

Christie, P & Collins, C. 1982. Bantu education: Apartheid ideology or labour reproduction? *Comparative Education,* 18(1): 59-75.

Coe, RJ. 2012. The nature of educational research. In J Arthur, M Waring, R Coe, & LV Hedges (eds.), *Research methods & methodologies in education*. London: SAGE: 5-14.

Cohen, L, Manion, L & Morrison, K. 2011. *Research methods in education*. 7th edition. Oxon: Routledge.

Connell, R. 2007. *Southern Theory*. Cambridge: Polity Press.

Cooley, CH. 1956. Part 1 - Primary aspects of organisation. *Social organisation - A study of the larger mind*. Glencoe, Illinois: Free Press: 1-60.

Council on Higher Education. 2010. Report on the national review of academic and professional programmes in education. Pretoria. *ISSUU.* [http://www.che.ac.za/sites/default/files/publications/Higher_Education_Monitor_11.pdf]. 11 November 2018.

Crenshaw, K. 2003a. Mapping the margins: Intersectionality, identity politics, and violence against women of color. In LM Alcoff & E Mendieta (eds.), *Identities: Race, class, gender, and nationality*. Malden: Blackwell Publishing: 175-200.

Crenshaw, KW. 2003b. Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. In AK Wing (ed.), *Critical race feminism*. New York: New York University Press: 23-33.

Crenshaw, KW. 2009. Race, reform, and retrenchment. In L Back & J Solomos (eds.), *Theories of race and racism: A reader,* Second ed. London and New York: Routledge Taylor & Francis Group: 616-627.

Cresswell, JW. 1998. *Qualitative inquiry and research design: Choosing among five traditions*.

California: SAGE Publications.

Cresswell, JW. 2014. *Research design - Qualitative, quantitative, and mixed methods approaches*. 4th edition. London: SAGE.

Dada, S, Burnhams, NH, Laubscher, R, Parry, C & Myers, B. 2018. Alcohol and other drug use among women seeking substance abuse treatment in the Western Cape, South Africa. *South African Journal of Science,* 114(9–10): 1-7.

Daniels, D & Damons, L. 2011. "I am more than just a coloured woman" – Narrating undergraduate experiences at a historically white South African university. *Africa Education Review,* 8(1): 148-168.

Davids, N. 2012. This woman is not for burning: Performing the biography and memory of Cissie Gool. *Social Dynamics,* 38(2): 253-276.

Davids, N. 2016. Deliberation, belonging and inclusion: Towards ethical teaching in a democratic South Africa. *Ethics and Education,* 11(3): 1-12.

Davids, N & Waghid, Y. 2015. The invisible silence of race: On exploring some experiences of minority group teachers at South African schools. *Power and Education,* 7(2): 155-168.

Davis, Z, Adler, J & Parker, D. 2007. Identification with images of the teacher and teaching in formalised in-service mathematics teacher education and the constitution of mathematics for teaching. *Journal of Education,* 42(2005): 33-60.

Derrida, J. 1981.Translator's notes. Chicago: University of Chicago Press: *Dissemination. vii-xxxv*.

Desmore, A. 1937. The Cape coloured people to-day : An address delivered to the league of coloured peoples, London. *Journal of Royal African Society,* 36(144): 347-356.

Divala, JJ. 2014. Black women academics in higher education: In search of inclusive equal voice and justice. *South African Journal of Higher Education,* 28(6): 2079-2087.

Dixson, AD & Rousseau, CK. 2005. And we are still not saved: Critical race theory in education ten years later. *Race Ethnicity and Education,* 8(1): 7-27.

Dollie, N. 2011. The dance of an intellectual mandarin: A study of Neville Alexander's thoughts on the language question in South Africa. University of South Africa. Unpublished MEd thesis, UNISA, Pretoria.

Dollie, N, Mahate, H, Marsh, J, Motala, E, Pease, J, Solomon, M & Soudien, C. 2013. Tribute to Neville Alexander. *Critique,* 40(4): 615-617.

Dubow, S. 1986. Race, civilisation and culture: The elaboration of segregation discourse in the inter-war years. *University of the Witwatersrand.*

[http://wiredspace.wits.ac.za/bitstream/handle/10539/8692/ISS-125.pdf?sequence=1]. 3 May 2019.

Dubow, S. 2013. Afrikaner nationalism, apartheid and the conceptualization of "race". *The Journal of African History,* 33(2): 209-237.

Dubow, S. 2014. *Apartheid, 1948-1994*. Oxford: Oxford University Press.

Duncan, GA. 2005. Critical race ethnography in education: Narrative, inequality and the problem of epistemology. *Race Ethnicity and Education,* 8(1): 93-114.

Du Preez, M. 2003. Diamonds are not forever. *Pale native: Memories of a renegade reporter*. Cape Town: Zebra Press: 131-137.

Eberle, TS. 2014. Phenomenology as a research method. In U Flick (ed.), *The SAGE handbook of qualitative data analysis*. London: SAGE Publications Ltd: 184-202.

Ellis, C, Adams, TE & Bochner, AP. 2011. Autoethnography: An overview. *Historical Social Research,* 36(4): 273-290.

English, L. (2016). STEM education K-12: Perspectives on integration. *International Journal of STEM Education*, 3(3): 1–8.

Erasmus, Z. 2012. Apartheid race categories: Daring to question their continued use. *Transformation: Critical Perspectives on Southern Africa,* 79(1): 1-11.

Erasmus, Z. 2017. *Race otherwise, forging a new humanism for South Africa*. Johannesburg: Wits University Press.

Erikson, EH. 1980. *Identity and the life cycle*. New York: WW Norton & Company, Inc.

Ernest, P. 2009. Mathematics education ideologies and globalization. In P Ernest, B Greer & B Sriraman (eds.). *Critical issues in mathematics education*. Information Age Publishing Inc. & The Montana Council of Teachers of Mathematics: 67-110.

Esin, C, Fathi, M & Squire, C. 2013. Narrative analysis: The constructionist approach. In U Flick (ed.), *The SAGE handbook of qualitative data analysis*. London: SAGE Publications Ltd: 203-216.

Everatt, D. 2012. Non-racialism in South Africa: Status and prospects. *Politikon,* 39(1): 5-28.

Fanon, F. 2008. *Black skin, white masks*. London: Pluto Press.

Fanon, F. 2009. The fact of blackness. In L Back & J Solomos (eds.), *Theories of race and racism: A Reader,* Second edition. London and New York: Routledge Taylor & Francis Group: 326-335.

February, CA. 2016. Re-imagining "nontraditional" student constructs in higher education: A case study of one South African University. Unpublished PhD thesis, University of the Western Cape, Cape town.

Fraser, N. 1995. From redistribution to recognition? Dilemmas of justice in a 'post-socialist' age. *New Left Review,* 212: 68-93.

Fraser, N. 2000. Rethinking recognition. *New Left Review,* 3(3): 107-118.

Fraser, N. 2001. Recognition without ethics? *Theory, Culture and Society,* 18(2–3): 21-42.

Fraser, N. 2008a. Reframing justice in a globalizing world. *Scales of Justice*. Cambridge, England: Polity Press: 12-29.

Fraser, N. 2008b. *Scales of justice: Reimagining political space in a globalizing world*. Cambridge: Polity Press.

Fraser, N. 2009a. *Scales of justice: Reimagining political space in a globalizing world*. New York and Chichester: Columbia University Press.

Fraser, N. 2009b. Feminism, capitalism and the cunning of history. *New Left Review,* 56(56): 97-117.

Fraser, N. 2013. *Fortunes of feminism: From state-managed capitalism to neoliberal crisis*. London and New York: Verso.

Friedman, TL. (2005). *The world is flat: A brief history of the twenty-first century*. New York: Farra, Strauss, and Giroux.

Geldenhuys, J & De Lange, N. 2007. Career identities of first-year female coloured students. *South African Journal of Education,* 27(1): 117-137.

Giliomee, H. 1995. The non-racial franchise and Afrikaner and coloured identities, 1910–1994. *African Affairs,* 94(375): 199-225.

Goldberg, DT. 1993. "Polluting the body politic": Race and urban location. In DT Goldberg (ed.)., *Racist culture, philosophy and politics of meaning*. Surrey: Blackwell Publishers: 185-205.

Goldberg, DT. 2009a. Racial knowledge. In L Back & J Solomos (eds.)., *Theories of race and racism: A reader*. Second edition. London and New York: Routledge Taylor & Francis Group: 209-225.

Goldberg, DT. 2009b. A political theology of race. *Cultural Studies,* 23(4): 513-537.

Gouws, A. 2020. Problematising race and gender in everyday research processes: A model of feminist research praxis. In J Jansen & . Walters (eds.), *Fault lines: A primer on race, science*

and society. Cape Town: Africa Sun Media: 175-188.

Grant, ML. n.d. The National Education Policy Act. 1967. *South African History Online.* [https://www.sahistory.org.za/sites/default/files/archive-files/BSFeb67.0036.4843.011.001.Feb1967.16.pdf]. 2 July 2020.

Groenewald, T. 2004. A phenomenological research design illustrated. *International Journal of Qualitative Methods,* 3(1): 42-55.

Harris, CI. 1995. Whiteness as property. In KW Crenshaw, N Gotanda, G Peller, & K Thomas (eds.), *Critical race theory: The key writings that formed the movements*. New York: The New Press: 276-291.

Heer, D. 2011. New perspectives on slavery and emanciparion in the British Caribbean. *The Historical Journal,* 54(3): 855-880.

Henderson, CE. 2014. AKA: Sarah Baartman, The Hottentot Venus, and black women's identity. *Women's Studies,* 43(7): 946-959.

Hendricks, C. 2005. Debating coloured identity in the Western Cape. *African Security Review,* 14(4): 117-119.

Herbst, E. 2006. The illness experience of HIV-infected low-income coloured mothers in the Winelands region : theoretical and practical implications. Unpublished PhD thesis. Stellenbosch University, Stellenbosch.

Hexham, IR. 1975. Christian National Education as an ideological commitment. *Collected Seminar Papers, Institute of Common Wealth Studies*, 20: 111-120.

Hicks, CD. 2009. "Bright and good looking colored girl": Black women's sexuality and "harmful intimacy". *Journal of the History of Sexuality,* 18(3): 418-456.

Holmes, C. 1975. Violence and race relations in Britain, 1953-1968. *Phylon (1960-),* 36(2): 113-124.

Honneth, A. 1995. *The struggle for recognition – The moral grammar of social conflicts*. Cambridge, Massachusetts: MIT Press.

Honneth, A. 2004. Recognition or redistribution? Changing perspectives on the moral order of society. *Theory, Culture & Society,* 18(2–3): 43-55.

Honneth, A. 2007. *Disrespect – The normative foundations of critical theory*. Cambridge, England: Polity Press.

Horrell, M. 1956. *The Group Areas Act - Its effect on human beings*. Johannesburg: South African Institute of Race Relations.

Horrell, M. 1966. *Group areas – The emerging pattern*. Johannesburg: South African Institute of Race Relations.

Hoskins, K. 2010. The price of success? The experiences of three senior working class female academics in the UK. *Women's Studies International Forum,* 33(2): 134-140.

Huber, J, Caine, V, Huber, M & Steeves, P. 2013. Chapter 7 Narrative inquiry as pedagogy in education: The extraordinary potential of living, telling, retelling, and reliving stories of experience. *Review of Research in Education,* 37(1): 212-242.

Hunley, KL, Cabana, GS & Long, JC. 2016. The apportionment of human diversity revisited. *American Journal of Physical Anthropology,* 160(4): 561-569.

James, C. 1970. Language factors in the education of 'coloured' peoples in Britain. *The Modern Language Journal,* 54(6): 420-423.

Jansen, J & Walters, C. (eds.). 2020. *Fault lines, a primer on race, science and society*. Cape Town: SUN Media Stellenbosch and CANRAD.

Jansen, J. 2019. Inaugural lecture: Prof Jonathan Jansen (2019). *YouTube.* [https://www.youtube.com/watch?v=cQzNp_DowF4]. 20 September 2019.

Jansen, JD. 2009. *Confronting race and the apartheid past: Knowledge in the blood*. Redwood City, California: Stanford University Press.

Jenkins, R. 2004. *Social identity*. 2nd edition. Londen: Routledge.

Johnson, RB. 1997. Examining the validity structure of qualitative research. *Education,* 118(2): 282-292.

Jordan, P. 2016. Waiting for October: Revisiting the national question. In A Zinn (ed.), *Non-racialism in South Africa: The life and times of Neville Alexander.* Cape Town: SUN MeDIA Stellenbosch and CANRAD: 1-31.

Jorde, LB. & Wooding, SP. 2004. Genetic variation, classification and "race". *Natural Genetics,* 36(11): 28-33.

Kelly, TR & Knowles JG. 2016. A conceptual framework for integrated STEM education. *International Journal of STEM Education,* 3(1): 1-11.

Khuzwayo, B. 2005. A history of mathematics education research in South Africa: The apartheid years. In R Vithal, J Adler, & C Keital (eds.), *Researching mathematics education in South Africa*. Cape Town: HSRC Press: 307-328.

Kjæret, K & Stokke, K. 2003. Rehoboth Baster, Namibian or Namibian baster? An analysis of national discourses in Rehoboth, Namibia. *Nations and Nationalism,* 9(4): 579-600.

Klausen, S. 2007. 'For the sake of the race': Eugenic discourses of feeblemindedness and motherhood in the South African medical record, 1903–1926. *Journal of Southern African Studies,* 23(1): 27-50.

Ladson-Billings, G. 1998. Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education,* 11(1): 7-24.

Ladson-Billings, G. 2005. The evolving role of critical race theory in educational scholarship. *Race Ethnicity and Education,* 8(1): 115-119.

Ladson-Billings, G & Tate IV, WF. 2006. Towards a critical race theory of education. In AD Dixon & CK Rousseau (eds.), *Critical race theory in education*. New York: Routledge: 11-30.

Leathwood, C & Read, B. 2009. *Gender and changing the face of higher education: A feminized future?* Maidenhead: Open University Press.

Lehohla, PJ. 2017. Whither a demographic dividend South Africa: The Overton window of political possibilities. *Statistics South Africa*. [statssa.gov.za/publications/OP001/OP0012017.pdf]. 11 June 2019.

Lerman, S. 1989. Constructivism, mathematics and mathematics education. *Educational Studies in Mathematics,* 20(2): 211-223.

Le Roux, K. 2016. Re-imagining mathematics and mathematics education for equity and social justice in the changing South African university. *Critical Studies in Teaching & Learning*, 4(2): 45-67.

Lesch, E. 2000. Female adolescent sexuality in a coloured community. Stellenbosch. Unpublished PhD thesis. Stellenbosch University, Stellenbosch.

Lipton, M. 1989. *Capitalism and apartheid – South Africa 1910-1986*. Cape Town: New Africa Books.

Lugones, M & Spelman E. 1983. Have we got a theory for you! Feminist theory, cultural imperialism and the demand for 'the woman's voice'. *Women's Studies International Forum.* 6(6): 573-581.

Machery, E & Faucher, L. 2007. Social construction and the concept of race. *Philosophy of Science,* 72(5): 1208-1219.

MacIntyre, A & Dunne, J. 2002. Alasdair MacIntyre on education: In dialogue with Joseph Dunne. *Journal of Philosophy of Education,* 36(1): 1-19.

Mackinley, E. 2016. *Teaching and learning like a feminist: Storying our experiences in higher education*. Rotterdam, The Netherlands: Sense Publishers.

Madileng, MM. 2014. Critical reflections: Experiencing discrimination, disrespect and disregard; forming a professional identity. *South African Journal of Higher Education,* 28(6): 2027-2040.

Magubane, BM. 1979. *The political economy of race and class in South Africa*. New York and London: Monthly Review Press.

Makhanya, S. 2016. My mother, my mentor: Valuing my mother's educational influence. In D Pillay, I Naicker & K Pithouse-Morgan (eds.), *Academic Autoethnographies: Inside Teaching in Higher Education*. Rotterdam: SensePublishers: 85-94.

Mangcu, X (ed.). 2015. What moving beyond race can actually mean: Towards a joint culture. *The colour of our future*. Johannesburg: Wits University Press: 1-16.

Marginson, S., Tytler, R., Freeman, B. & Roberts, K. (2013). *STEM: Country comparisons: International comparisons of science, technology, engineering and mathematics*. Melbourne: Australian Council of Learned Academies.

Maré, G. 2003. 'Non-racialism' in the struggle against apartheid. *Society in Transition,* 34(1): 13-37.

Maseti, T. 2018. The university is not your home: Lived experiences of black women in academia. *South African Journal of Psychology*, 48(3): 343-350.

Matsuda, MJ. 1991. Voices of America: Accent, antidiscrimination law, and a jurisprudence for the last reconstruction. *Yale Law Journal,* 100(5): 1329-1407.

May, V. 2012. Narrative analysis by Vanessa May. *YouTube*. [https://www.youtube.com/watch?v=A7TfEVHHZzI]. 22 December 2019.

Mbeki, T. 1996. Thabo Mbeki's speech - I am an African. *Afrika Tanulmányok*. [http://afrikatanulmanyok.hu/userfiles/File/beszedek/Thabo Mbeki_Iam an African.pdf] 28 February 2019.

McBride, C. 2013. *Recognition*. Cambridge, England: Polity Press.

McCann-Mortimer, P, Martha, A & LeCouteur, A. 2004. 'Race' and the human genome project. *Discourse & Society,* 15(4): 409-432.

Mead, GH. 1964. *George Herbet Mead on social psychology*. Chicago and London: The University of Chicago Press.

Mead, GH. 2003. The self. In LM Alcoff & E Mendieta (eds.), *Identities: Race, Class, Gender, and Nationality*. Malden: Blackwell Publishing: 32-40.

Mendieta, E. 1997. Identity and liberation. *Peace Review,* 9(4): 497-502.

Milner-Thornton, J. 2009. Absent white fathers: Coloured identity in Zambia. In M Adhikari (ed.), *Burdened by race, coloured identities in Southern Africa*. Cape Town: UCT Press: 185-207.

Ministry of Education. 2001. National plan for higher education. *South African Government.* [http://www.justice.gov.za/commissions/FeesHET/docs/2001-NationalPlanForHigherEducation.pdf]. 26 July 2020.

Moffett, H. 2006.'These women, they force us to rape them': Rape as narrative of social control in post-aprtheid South Africa. *Journal of Southern African Studies,* 32(1): 129-144.

Mosupi, A. 2017. Book's section on coloured culture to be updated after backlash on Twitter. *Times Live* (South Africa). 12 February. [https://www.timeslive.co.za/news/south-africa/2017-02-12-books-section-on-coloured-culture-to-be-updated-after-backlash-on-twitter/]. 26 July 2020.

Msimanga, A. 2014. Too late to come back? The paradox of being a 50-year-old 'early career' black female academic. *South African Journal of Higher Education,* 28(6): 2013-2026.

Muzondidya, J. 2009. Race, ethnicity and the politics of positioning: the making of coloured identity in colonial Zimbabwe, 1890–1980. In M Adhikari (ed.), *Burdened by race, coloured identities in Southern Africa*. Cape Town: UCT Press: 156-184.

National Commission on Higher Education. 1996. NCHE discussion paper: A framework for transformation, 1996. *Stanford Libraries.* [https://searchworks.stanford.edu/view/4063601]. 26 July 2020.

National Planning Commission. 2011. *National Development Plan: Vision for 2030 - Chapter 9. National Planning Commission.* [http://www.nationalplanningcommission.org.za/Pages/NDP.aspx]. 26 July 2020.

Nayyar, D. 2007. Globalisation: What does it mean for higher education?. *Economic & Political Weekly*, 42(50): 30-35.

Ndebele, N. 2002. The African National Congress and the policy of non-racialism: A study of the membership issue. *Politikon,* 29(2): 133-146.

Ndimande, BS. & Neville, HA. 2018. Urban education and black racial identity in South Africa. *Urban Education,* 53(7): 929-956.

Ndlovu, NS. 2014. Turning adversity into opportunity: A black woman's journey into academia. *South African Journal of Higher Education,* 28(6): 2041-2051.

Nicholson, Z. 2011. Outcry over 'jou ma se kinders' racist jibes. *IOL News* (National). 1 March. [https://www.iol.co.za/news/outcry-over-jou-ma-se-kinders-racist-jibes-1034219]. 7 July 2018.

Nieuwoudt, S, Dickie, KE., Coetsee, C, Engelbrecht, L & Terblanche, E. 2019. Retracted Article:

Age- and education-related effects on cognitive functioning in colored South African women. *Aging, Neuropsychology, and Cognition*.

Nkambule, T. 2014. Against all odds: The role of 'community cultural wealth' in overcoming challenges as a black African woman. *South African Journal of Higher Education*. 28(6): 1999-2012.

Omi, M & Winant, H. 1994. Racial formation. *Racial formation in the United States: From the 1960s to the 1990s*. Second edition. New York: Routledge & Kegan Paul Inc.: 53-61.

Omi, M & Winant, H. 2004. The theoretical status of the concept of race. In G Ladson-Billings & D Gillborn (eds.), *Multicultural education*. London: Routledge: 1-15.

Parker, D, Davis, Z & Adler, J. 2005. Mathematics for teaching and competence pedagogies in formalised in-service mathematics teacher education in South African universities. In *Proceedings of the 4th International Mathematics Education and Society Conference. Centre for Learning Research. Griffith University. Australia*. 268-277.

Petry, M.J. (ed.). 1978. *Hegel's philosophy of subjective spirit*. Dordrecht, Holland: Reidel.

Pillay, S. 2016. Why I am no longer a non-racialist: Identity and difference. In X Mangcu (ed.), *The colour of our future*. Johannesburg: Wits University Press: 133-152.

Pitpitan, EV, Kalichman, SC, Eaton, LA, Sikkema, KJ, Watt, MH, Skinner, D & Pieterse, D. 2016. Men's behavior predicts women's risks for HIV/AIDS: Multilevel analysis of alcohol-serving venues in South Africa. *Prevention Science,* 17(4): 472-482.

Ramohai, J. 2014. 'Marginalised access' in South African higher education: Black women academics speak! *Mediterranean Journal of Social Sciences,* 5(20): 2976-2985.

Ramohai, J. 2019. A black woman's perspective on understanding transformation and diversity in South African higher education. *Transformation in Higher Education,* 4: 1-11.

Republic of South Africa. 1963. *Coloured Persons Education Act 47 of 1963*. Pretoria, South Africa.

Republic of South Africa. 1968. *Universities Amendment Act of 1968*. Pretoria, South Africa.

Reynolds, H & Richards, N. 2003. *Women today, a celbration: Fisty years of South African Women.* Cape Town: Kwela Books.

Richards, R. 2017. *Bastaards or humans, the unspoken heritage of coloured people, Volume 1*. n.p.: Indaba Publishers.

Rogers, J. 1972. Darwinism and Social Darwinism. *Journal of the history of ideas*, 33(2): 265-280.

Rosenberg, T. 2016. Conversations and the cultivation of self-understanding. In D Pillay, I Naicker & K Pithouse-Morgan (eds.), *Academic Autoethnographies: Inside Teaching in Higher Education*. Rotterdam: SensePublishers: 33-48.

Russell, DEH. 1989. *Lives of courage: Women for a new South Africa*. Cape Town: Basic Books, Inc., Publishers.

Sachs, A. 1969. Enter the British legal machine: Law and administration at the Cape 1806–1910. *Institute of Commonwealth Studies Collected papers*. 8–34. [https://sas-space.sas.ac.uk/3410/1/Societies_of_Southern_Africa_vol1_1971__Sachs.pdf] 13 July 2019.

Sawyer-Kurian, KM, Wechsberg, WM & Luseno, WK. 2009. Exploring the differences and similarities between black/African and coloured men regarding violence against women, substance abuse, and HIV risks in Cape Town, South Africa. *Psychology of Men and Masculinity*, 10(1): 13-29.

Scheurich, JJ & Young, MD. 1997. Coloring epistemologies: Are our research epistemologies racially biased? *Educational Researcher,* 26(4): 4-16.

Schmid, J. 2019. Autoethnography: Locating the self as standpoint in post-apartheid South Africa. In S Laher, A Fynn, & S Kramer (eds.), *Transforming research methods in the social sciences – Case studies from South Africa*. Johannesburg: Wits University Press: 265-279.

Schwartz-Shea, P & Yanow, D. 2012. The rhythms of interpretive research I: Getting going. In D Yanow (ed.), *Interpretive research design: Concepts and processes*. New York and London: Routledge: 54-77.

Seshadri-Crooks, K. 2000. *Desiring whiteness: A lacanian analysis of race*. London and New York: Routledge.

Shackleton, L, Riordan, S & Simonis, D. 2006. Gender and the transformation agenda in South African higher education. *Women's Studies International Forum,* 29(6): 572-580.

Shulman, LS. 1986. Those who understand: Knowledge growth in teaching. *Educational Researcher,* 15(2): 4-14.

Sio, AA. 1976. Race, colour and miscegenation: The free coloured of Jamaica and Barbados. *Caribbean Studies,* 16(1): 5-21.

Sizwe, N. 1979. *One Azania, one nation*. London: Zed Press.

Snyder, CR. 2014. A woman's place: Women of colour navigating doctoral education in South Africa. *International Journal of Multicultural Education,* 16(2): 15-35.

Solorzano, D. 1997. Images and words that wound: Critical Race Theory, racial stereotyping, and

teacher education. *Teacher Education Quarterly,* 24(3): 5-19.

Solorzano, DG & Yosso, TJ. 2001. From racial stereotyping and deficit discourse toward a critical race theory. *Multicultural Education,* 9(1): 2-8.

Soske, J. 2015. The impossible concept: Settler liberalism, Pan-Africanism, and the language of non-racialism. *African Historical Review,* 47(2): 1-36.

Soudien, C. 2011. The contribution of radical Western Cape intellectuals to an indigenous knowledge project in South Africa. *Transformation,* 76(1): 44-66.

Soudien, C. 2012. The modern seduction of race: Whither social constructionism? *Transformation,* 79: 18-38.

Soudien, C. 2013. "Race" and its contemporary confusions: Towards a re-statement. *Journal of Social and Political Theory,* 60(136): 15-37.

Soudien, C. 2015. A brief engagement with some conceptual challenges in the discussion about 'race' and racism. *Power and Education,* 7(2): 143-154.

Soudien, C. 2016. Non-racialism politics: Reading being human through the life of Neville Alexander. In Zinn, A, *Non-racialism in South Africa: The life and times of Neville Alexander*. Cape Town:African SUN MeDIA: 129-163.

Spivak, GC. 1988. Can the subaltern speak? In C Nelson & L Grossberg (eds.), *Marxism and the interpretation of culture*. London: Macmillan: 24-28.

Staff reporter, 2017. Coloured stereotype uproar amplifies calls for publisher transformation. *Mail &. Guardian* (National). 13 February. [https://mg.co.za/article/2017-02-13-need-for-transformed-book-publishers-highlighted-after-book-accused-of-racism] 2 August 2020.

Sumpter, AR. 2008. Segregation of the free people of color and the construction of race in antebellum New Orleans. *Southeastern Geographer,* 48(1): 19-37.

Swartz, S, Mahali, A, Arogundade, E, Khalema, E, Rule, C, Cooper, A, Stanley, M & Naidoo, P. 2017. Ready or not! Race, education and emancipation: A five-year longitudinal, qualitative study of agency and impasses to success amongst higher education students in a sample of South African universities. *HSRC.* [http://repository.hsrc.ac.za/handle/20.500.11910/11305]. 25 July 2020.

Taylor, C. 1989. *Sources of the self: The making of the modern identity*. Cambridge, Massachusetts: Harvard University Press.

Taylor, C. 1998. The politics of recognition. *Hiram Mélendez Juarbe.* [http://elplandehiram.org/documentos/JoustingNYC/Politics_of_Recognition.pdf]. 28 August

2018.

Timm, DN. 2016. From exclusion through inclusion to being in my element: Becoming a higher education teacher across the apartheid-democratic interface. In D Pillay, I Naicker & K Pithouse-Morgan (eds.), *Academic Autoethnographies: Inside Teaching in Higher Education*. Rotterdam: SensePublishers: 95-115.

Tugendhat, E & Stern, P (trans.). 1986. Mead, II: The self. *Self-consciousness and self-determination*. Cambridge, Massachusetts and London, England: MIT Press: 237-262.

Tutu, D, Boraine, A, Burton, M, Finca, B, Khampepe, S, Lyster, R, Malan, W, Mgojo, K, *et al.* 1998. Volume three - Truth and reconciliation commission of South Africa report. *Department of Justice and Constitutional Development.* [http://www.justice.gov.za/trc/report/finalreport/Volume 3.pdf]. 25 August 2019.

Union of South Africa. 1949. *Prohibition of Mixed Marriages Act 55 of 1949*. Pretoria, South Africa: Government Gazette.

Union of South Africa. 1950a. *Population Registration Act 30 of 1950*. Pretoria, South Africa: Government Gazette.

Union of South Africa. 1950b. *Group Areas Act 41 of 1950*. Pretoria, South Africa: Government Gazette.

Weiss, SW. 1987. The race hygiene movement in Germany. *Osiris,* 3: 193-236.

Wilkins-Yel, KG., Hyman, J & Zounlome, NOO. 2018. Linking intersectional invisibility and hypervisibility to experiences of microaggressions among graduate women of color in STEM. *Journal of Vocational Behavior*, 113: 1-11.

Wing, AK. 2003. Introduction. *Critical race feminism*. Second edition. New York: New York University Press: 1-19.

Winnicot, DW. 1965. *The family and individual development*. London: Tavistock Publications Limited.

Wolhuter, C. 2006. Teacher training in South Africa: Past, present and future. *Education Research and Perspectives,* 33(2): 124-139.

Wolpe, H. 1988. *Race, class & the apartheid state*. London: Unesco Press.

Van Wyk, B. 2016. Indigenous rights, indigenous epistemologies, and language: (Re)construction of modern Khoisan identities. *Knowledge Cultures,* 4(4): 33-45.

Yin, RK. 1994. *Case study research: Design and methods*. 2nd edition. California: SAGE Publications.

Yin, RK. 2009. *Case study research: Design and methods*. 4th edition. California: SAGE Publications.

Yin, RK. 2014. *Case study research: Design and methods*. California: SAGE Publications.

Yuval-Davis, N. 2011. *The politics of belonging - Intersectional contestations*. London: SAGE Publications.

ANNEXURE 1:
ETHICS APPROVAL LETTER

UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

NOTICE OF APPROVAL

REC Humanities New Application Form

14 March 2019

Project number: 8455

Project Title: Exploring lived experiences and identities of Coloured women as professional mathematics educators in higher education

Dear Ms Sinobia Kenny

Your REC Humanities New Application Form submitted on 20 February 2019 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
14 March 2019	13 March 2020

GENERAL COMMENTS:

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (8455) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Research Protocol/Proposal Application	Kenny - Research Proposal - Ethics	20/02/2019	
Informed Consent Form	Kenny - Consent form	20/02/2019	
Data collection tool	Kenny - Interviews_Background information que	20/02/2019	
Default	Kenny - DESC_REC_RESPONSE LETTER	20/02/2019	

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.

The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research: Principles Structures and Processes (2nd Ed.) 2015. *Annually a number of projects may be selected randomly for an external audit.*

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use.

3. Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents/process, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the progress report in a timely fashion to ensure a lapse in REC approval does not occur.** If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current

Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouche within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8. Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9. Final reports. When you have completed (no further participant enrollment, interactions or interventions) or stopped work on your research, you must submit a Final Report to the REC.

10. On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

ANNEXURE 2:
INTERVIEW CONSENT FORM FOR RESEARCH PARTICIPANTS

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCH UNIVERSITY

CONSENT TO PARTICIPATE IN RESEARCH

Exploring lived experiences and identities of Coloured women as professional mathematics educators in higher education

You are invited to take part in a study conducted by **Sinobia Kenny**, from the **Department of Education Policy Studies** at Stellenbosch University. You were approached as a possible participant because you and I may have worked together in the past as professional mathematics educators in higher education or because you have been recommended by other professional mathematics educators that I have approached to participate in this study.

1. PURPOSE OF THE STUDY

The purpose of the case study is to explore how the lived experiences and identities of coloured women (by classification) determined and influenced professional mathematics educators in higher education in South Africa.The research will take into account background biographical information, educational experiences, and the careers of coloured women, as they navigate their way from apartheid to a democratic society. The purpose of the study is to get a better understanding of what determined and influenced women who were classified as coloured during apartheid who are exercising or have exercised roles as mathematics education professionals in higher education. The study presents an opportunity for the silent voices of coloured women to be heard and also an opportunity for stereotypical myths about coloured identity to be contested.

2. WHAT WILL BE ASKED OF ME?

If you agree to take part in this study, you will be asked to:

- Complete background information relating to, for example, to the respondent's age, their primary and secondary schools and the schools' locations and the respondent's academic qualifications.

- Participate in one/two one-to-one interviews with myself.

  - The interview questions will be emailed to you in advance.
  - The length of each interview will last at most two hours.
  - You will decide on a convenient time and venue for the interviews.
  - During the interviews you will be asked to answer questions that include your schooling and tertiary education experiences, and the highlights and challenges in pursuing a career as professional mathematics educators in higher education. You will also be asked to answer questions about your experience of being classified as Coloured during apartheid.
  - After each interview you will asked to read the interview transcript to rectify any misrepresented data and raise discrepancies.

3. POSSIBLE RISKS AND DISCOMFORTS

I will respect your responses and minimise risks and discomfort to the best of my ability. There may be a few questions that bring slight discomfort however, any risks or discomfort is not intentional for this study.

4. POSSIBLE BENEFITS TO PARTICIPANTS AND/OR TO THE SOCIETY

The study may be beneficial to the participants because of the self-reflective nature of the study and the opportunity to voice the participants' lived experiences.

5. PAYMENT FOR PARTICIPATION

There will be no payment for participation in the study.

6. PROTECTION OF YOUR INFORMATION, CONFIDENTIALITY AND IDENTITY

Any information you share with me during this study and information that can identify you as a participant will be protected. For confidentiality, all data will be stored securely on password protected storage devices and a password protected laptop. With regards to anonymity, all participants' original names and surnames will be deleted and replaced with pseudonyms in the final research report.

The interview(s) will be audio-recorded and transcribed, and stored on a password protected storage device. Each participant will be given the opportunity to review or edit the transcriptions before the data is used for analyses. Only the principal investigator will have access to the voice recordings. The voice recordings will be erased after the research has been completed. Participants' voice recordings and transcripts will be anonymised and confidentiality will be maintained.

Any follow-ups for background information and interviews would be for clarification only – and not to collect information which has been omitted by the participant. It remains your right, as a participant, to refuse to answer questions at any stage of the research.

7. PARTICIPATION AND WITHDRAWAL

Each participant can choose whether to be in this study or not. If you agree to take part in this study, you may withdraw at any time without any consequence or penalty. You may also refuse to answer any questions you don't want to answer and still remain in the study. The researcher may withdraw you from this study if the researcher is unable to reach the participant for the duration of the data collection period. The data collection period will be agreed with the participants.

8. RESEARCHERS' CONTACT INFORMATION

If you have any questions or concerns about this study, please feel free to contact **Sinobia Kenny** at **sinobiak@icloud.com** **or 072 874 5339** and/or the supervisor **Professor Nuraan Davids** at **nur@sun.ac.za** or **+27 21 808 2877**.

9. RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

DECLARATION OF CONSENT BY THE PARTICIPANT

As the participant I confirm that:

- I have read the above information and it is written in a language that I am comfortable with.
- I have had a chance to ask questions and all my questions have been answered.
- All issues related to privacy, and the confidentiality and use of the information I provide, have been explained.

By signing below, I _____ agree to take part in this research

study, as conducted by **Sinobia Kenny**.

_____ _____

Signature of Participant **Date**

DECLARATION BY THE PRINCIPAL INVESTIGATOR

As the **principal investigator,** I hereby declare that the information contained in this document has been thoroughly explained to the participant. I also declare that the participant has been encouraged (and has been given ample time) to ask any questions. In addition, I would like to select the following option:

	The conversation with the participant was conducted in a language in which the participant is fluent.
	The conversation with the participant was conducted with the assistance of a translator (who has signed a non-disclosure agreement), and this "Consent Form" is available to the participant in a language in which the participant is fluent.

_____ _____

Signature of Principal Investigator **Date**

ANNEXURE 3:
INTERVIEW SCHEDULE

SECTION 1: 'COLOURED' IDENTITY

1. What are your earliest memories of apartheid?
2. In which area did you grow up? Did you experience forced removals?
3. What was your experience of growing up during apartheid, as a young girl? Who were the key people in your life during this period?
4. What was your experience of primary school? Who were the people that influenced you most during primary school?
5. What was your experience of secondary school? Who were the people that influenced you most during secondary school?
6. Did apartheid have any significant impact on your life? If so, how and what?
7. When did you become aware of race? How was race experienced by you during your primary and/or secondary schooling? Was race a lived experience outside of school?
8. Did you have an understanding of racial categories, and that you were assigned to a category of 'coloured'?
9. What did you understand by being categorised as 'coloured'? Is this a category or group with which you identify? Do you agree with being described as such?
10. How did you experience this label of 'coloured'?
11. How do you feel about this label now? Do you think it still matters in a post-apartheid society?

SECTION 2: PROFESSIONAL MATHEMATICS EDUCATION

1. What career dreams did you have for yourself?
2. Were you always interested in mathematics and mathematics education? What drew you to this career? Who were your role models?
3. When did you begin to notice that you had an interest in teaching as a career? Why do you think so? Who were your role models?

4. Tell me about how you entered a career as a mathematics educator in higher education. Opportunities/support? Challenges?
5. Did you believe that you have any contribution to maths education? If so, what is this contribution?
6. Who would you consider as having influenced your role as a professional mathematics educator in higher education? How has he/she/they influenced you in your role?
7. How has being classified as coloured during apartheid influenced your role as a professional mathematics educator in post-apartheid South Africa?
8. Do you believe that there are more opportunities for you now, than during apartheid? Elaborate
9. Can you give examples of highlights in your role as a professional mathematics educator in higher education? Have there been any challenges in this role?
10. What are your aspirations as a mathematics educator in HE?

SECTION 3: BACKGROUND INFORMATION

Current age: .....

Current qualifications: .....

Without an emphasis on the order of your experience:

Number of years of experience of primary school teaching: .....

Number of years of experience of secondary school teaching: .....

Number of years of lecturing at a tertiary education(s): .....

Fulltime / part time /contract: .....

Current academic/professional role: .....

PRIMARY SCHOOL

Suburb(s): .....

Town (s): .....

Province (s): .....

SECONDARY SCHOOL

Suburb (s): .....

Town(s): .....

Province (s): .....

TERTIARY EDUCATION

Qualification (s) awarded: .....

.....

Institution(s) where awarded: ....

.....

Year (s) awarded: .....