# THE RELATIONSHIP BETWEEN IDENTITY STATUS AND CAREER MATURITY IN MALE AND FEMALE ADOLESCENTS IN THE SOUTH AFRICAN CONTEXT.

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Dissertation submitted in partial fulfilment of the requirements for the degree

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This is to confirm that I, David Kaplan, a professional editor and proofreader, have edited Siphe Mahlaba's dissertation titled THE RELATIONSHIP BETWEEN IDENTITY STATUS AND CAREER MATURITY IN MALE AND FEMALE ADOLESCENTS IN THE SOUTH AFRICAN CONTEXT as per protocol.

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#### **Abstract**

Adolescence is a transitional stage between childhood and adulthood and is characterised by numerous and multidimensional developments. Identity development is one of the major developments that takes place during this developmental phase. Identity develops through a process of exploration and commitment, influenced by a range of proximal and distal contextual factors. Furthermore, this psychosocial task is linked to other key domains of development such as career development. The development of a career is a long-term process and it is in adolescence where the first formal steps of crafting a career are noted. Associated with a successful career development process is the psychosocial factor of career maturity.

Against this background, adolescents are required to be concerned about vocational goals while simultaneously shaping their identities. Accordingly, this research study aimed to explore a relationship between identity status and career maturity in male and female adolescents in the South African context. This research study is anchored by numerous theoretical frameworks including the Psychosocial Development Theory by Erik Erikson and Identity Status Theory by James Marcia, which were utilised to inform on identity and the development thereof. For the variable of career maturity the Career Development Theory by Donald Super, the Career Maturity Model by John Crites and the Career Construction Theory by Mark Savickas are referenced.

A non-experimental-type, quantitative research study and correlational and criterion group designs were employed in this research study. The final sample of participants totalled 362. The sample of participants was obtained from the Mangaung area using a non-probability, convenience sampling approach. The participants had to be in the adolescent developmental phase and up to the maximum age of 21. Data was collected through a questionnaire battery. A biographic questionnaire was used to obtain biographic information. To measure ego

identity status, the Objective Measure of Ego Identity Status (OMEIS) by Adams et al. (1979) was used and to assess career maturity, the adapted Career Maturity Inventory (CMI) by Crites and Savickas (as cited in Savickas & Porfeli, 2011) was used.

Data was analysed using descriptive statistics and inferential statistics, namely the multivariate analyses of variance (MANOVA) and the standard multiple regression analysis, which revealed a significant and positive relationship between achievement identity status and career maturity. Additionally, the results by gender were found to be non-significant.

Based on the results, it is concluded that a coherent sense of identity is a positive predictor of career maturity, while gender in the South African context is not an associated factor.

*Key words*: adolescence, career development, career maturity, culture, gender, history, identity development, identity status, South African context.

# **Contents**

Declaration	i
Declaration by Supervisor	ii
Proof of Language Editing	iii
Acknowledgements	iv
Abstract	V
Table of Contents	viii
List of Tables	ix
CHAPTER 1: ORIENTATION TO RESEARCH STUDY	1
1.1 Background Population and Context	2
1.1.1 Research Population	2
1.1.2 Research Context	6
1.2 Research Rationale and Aim	6
1.3 Overview: Theoretical Frameworks	7
1.4 Overview: Research Methodology	10
1.5 Delineation of Chapters	12
1.6 Chapter Summary	14
CHAPTER 2: IDENTITY DEVELOPMENT DURING ADOLESCENCE IN	N THE SOUTH
AFRICAN CONTEXT	15
2.1 Defining Adolescence	15
2.2 Domains of Adolescence Development	18
2.2.1 Physical Domain of Development	19
2.2.2 Cognitive Development.	20

2.2.3 Psychosocial Development	21
2.3 Identity Development in Adolescence	23
2.4 Identity Development Theories	26
2.4.1 Erikson's Psychosocial Development Theory	26
2.4.2 Marcia's Ego Identity Status Paradigm	30
2.4.3 Other Relevant Identity Theories	33
2.5 Development of Identity in the South African Context	35
2.6 Gender and Identity Development	41
2.7 Chapter Summary	45
CHAPTER 3: CAREER MATURITY DURING ADOLESCENCE IN T	HE SOUTH
AFRICAN CONTEXT	46
3.1 Conceptual Foundations	46
3.1.1 Career	46
3.1.2 Career Development	47
3.2 Career Maturity	49
3.3 Theories of Career Maturity	51
3.3.1 Super's Career Development Theory	52
3.3.2 Crites' Model of Career Maturity	55
3.3.3 Savickas' Career Construction Theory	58
3.4 Career Maturity in Adolescence	61
3.5 Career Maturity and Gender	64
3.6 Career Maturity and the South African Context	67

3.7 The Association between Career Maturity and Ego Identity Status
3.8 Chapter Summary
CHAPTER 4: METHODOLOGY74
4.1 Research Aim and Questions
4.2 Research Design and Approach
4.3 Research Participants and Sampling Procedures
4.4 Procedures of Data Collection
4.4.1 Biographical Questionnaire
4.4.2 Measure of Ego Identity Status (OMEIS)
4.4.3 Career Maturity Inventory (CMI)
4.5 Data Analysis
4.6 Ethical Considerations
4.7 Chapter Summary
CHAPTER 5: RESULTS AND DISCUSSION
5.1 Results
5.1.1 Descriptive Statistics
5.1.2 Inferential Statistics
5.1.2.1 Gender Differences in Career Maturity and Identity Status
5.1.2.2 Explanation for the Variance in Career Maturity
5.2 Discussion
5.2.1 Findings Related to the Descriptive Statistics

5.2.2 Findings Related to Gender Differences on the Variables of Interest	95
5.2.3 Findings Related to the Explanation of Variance in Career Maturity	96
5.3 Chapter Summary	100
CHAPTER 6: SUMMARY, LIMITATIONS AND RECOMMENDATIONS	101
6.1 Summary of Key Findings	101
6.2 Limitations of the Current Study	103
6.3 Recommendations for Future Studies	105
6.4 Chapter Summary	106
References	105
Appendix A: Biographic Questionnaire	158
Appendix B: Measure of Ego Identity Status	159
Appendix C: Career Maturity Inventory (CMI)	161
Appendix D: Informed Consent Form	162
Appendix E: Turn It In Report	163

# **List of Tables**

Table 1: Distribution with Regard to Age, Gender and Language Biographic         7	8
<b>Table 2:</b> Minimum, Maximum, Mean, and Standard Deviation.	8
Table 3: Pearson's Product-Moment Correlation Coefficients among Study Variables90	0

#### **CHAPTER 1: ORIENTATION TO RESEARCH STUDY**

"Of greatest interest to identity status theorists and researchers are the attitudes and behaviours relevant to the vocational developmental tasks from the ages of fourteen through twenty-five, for this is the period of career exploration and establishment, and corresponds to the separation-individuation phase of adolescence and young adult development" (Raskin, 1985, p. 29).

The great interest referenced by Raskin (1985) stems from recognition that adolescents are required to be concerned about vocational goals while simultaneously shaping an image of themselves known as identity development (Verhoeven et al., 2019). Selecting a career to pursue is one of the important decisions adolescents have to make, which in turn has significant consequences on their identity (Coertse & Schepers, 2004). As such, Super (1990) states that pursuing an occupation during the adolescence developmental phase serves as a major source of information for the process of identity development. Correspondingly, this research study seeks to explore the relationship between identity status and an identified attitudinal and behavioural concept of career maturity (Crites, 1973; Hirschi, 2011), which has been linked to vocational development precisely within the developmental phase of adolescence (Super, 1950). Furthermore, this relationship is explored taking into account gender and the specific context of South Africa.

Against this background, in the opening chapter of this research study the reader is orientated on the foundational facets of this research. Firstly, this is done by providing preliminary background information on the variables of interest. The theoretical frameworks underpinning this research study and the methodological approach used to fulfil the primary

goal are discussed. Finally, each of the six chapters which comprise this research study is briefly outlined. The chapter concludes with a brief summary.

# 1.1 Background Population and Context

In this section of the chapter, background information on the research population (adolescents) in relation to the variables (identity status, career maturity and gender) and context (South Africa) are discussed.

# 1.1.1 Research Population

Based on the introduction, it is evident that the phase of adolescence is filled with an array of developmental activities. According to Brittian (2012), Dahl et al. (2018), Kroger (2007) and the National Academies of Sciences, Engineering, and Medicine (2019), the developmental activities are in the domain of cognitive, emotional, social and motivational development and are attributable to the changes in brain structure, function and connectivity as well as the influence of a unique environment inhabited by an adolescent (Bell, 2016; Bennett & Kang, 2001). Moreover, this multilevel nature of development during this developmental phase may take on a different sequence for males and females (Bogin, 2015; Satterthwaite et al., 2014). For instance, Lenroot and Giedd (2010) note that longitudinal studies found that there are gender differences in the trajectory of brain development during adolescence and the outcomes thereof. Overall, gender impacts how adolescents manage the various developments pertinent to this developmental phase, however, the differences are generally found to be minor (Perry & Pauletti, 2011).

A key and dynamic task of identity development (Arnett, 2000; Crocetti et al., 2007; Erikson, 1950, 1968; Marcia, 1980) takes place during this developmental phase. It is a process that is precipitated by self-evaluation and social redefinition (Brittian, 2012). It is a pivotal task associated with healthy development (Erikson, 1950; Syed & McLean, 2017), such that failure to achieve this task is linked to maladaptive outcomes in adolescence (Crocetti et al., 2013). Identity development is characterised by continuous progressive change or stability (Klimstra et al., 2010), as facilitated by the ontological processes of exploration and commitment (Marcia, 1980).

A contentious factor in identity development is the concept of gender (Kroger, 1997). Overall, there appears to be various perspectives as to whether or not gender is a significant factor in the outcomes of identity development, and the discussions on this subject generally focus on issues of whether or not the structure, process and time of identity development is similar for both genders (Cramer, 2000). For instance, Smith (2016) states that gender is a significant element in how identity is constructed and expressed. Alternatively, Sorell and Montgomery (2001) are proponents of the view that gender differences in identity development occur on the basis that females approach their process based on their inherent relational orientation, while males approach it from a perspective of dispositional agency and separateness.

Notably, while the prime task of identity development is underway during the adolescence developmental phase, adolescents are also confronted by other pressing developments in the occupational domain, such as selecting a career (Atli, 2017). This career development of the adolescent population is marked by real planning and decision-making when compared to the previous developmental phases, which are typically marked by fantasy (Abid, 2017; Devi,

2018; Super, 1957). In particular, the high school years correspond with the career development stage of exploration, wherein adolescents must extend the exploration towards possible careers and eventually crystallise their career choices (Karacan-Ozdemir & Guneri, 2017; Porfeli & Lee, 2012).

For adolescents in the South African context, the nature of the formal education system evokes career exploration and planning. For instance, upon the completion of grade 9 and while transitioning into grade 10, learners have to independently select a combination of educational subjects which they focus on for the remainder of their schooling years.

Furthermore, it is these subjects which reflect on their final certificates and form the bases for the type of courses they are eligible to enrol for in institutions of higher learning (Jonck & Swanepoel, 2014; Maila & Ross, 2018; Poskitt & Bonney, 2016). In turn, the right choice of subjects in grade 10 is dependent on the learners having insight into the career paths that they wish to pursue in future (Department of Basic Education, 2019). Therefore, high school years are important to career development of individuals, as decisions taken during this period lay the foundation for their future career trajectory (Gati & Saka, 2001; Gottfredson, 1981; Super, 1990).

In order to execute vocational tasks such as selecting a career choice, there are certain basic competences that an individual needs to possess (Atli, 2017). Career maturity is an attitudinal and behavioural competence (Crites, 1973; Super, 1961), which is identified as crucial to successful career development (Creed & Patton, 2003). More so, in the 21<sup>st</sup> century wherein there are constant changes in the economy such as downsizing, exportation and layoffs of jobs, thus requiring the youth of this day and age to be equipped with the necessary competencies such as career maturity in order to cope and advance their careers (Kaur &

Kaur, 2014). This concept is influenced by a wide range of factors such as gender, race, years in school, locus of control, age, culture, historical times, economic status and self-concept (Ahlgren, 2001; González, 2008; Patton & Creed, 2003; Repetto, 2001).

Thus, it is important to establish career maturity/career adaptability before the critical career decision-making period (Juwita, 2018; Karacan-Ozdemir, 2019), as individuals who are career mature are deemed ready to select the appropriate career choices (Barendse, 2015; Buys, 2014; Crites, 1976; Super, 1957), such as those highlighted for adolescents for the South African context. This is confirmed by Babarović and Šverko (2016), Lee and Jun (2020) and Munawir et al. (2018), who concluded that students with high levels of career maturity had comparatively performed better in school and also planned better for higher educational attainments. On the other hand, adolescents with low levels of career maturity are likely to make errors in the processes of career development (Hidayat & Alsa, 2018).

Gender is implicated in career maturity. The exploration of gender in career development has increasingly been encouraged by the noticeable surge of women into the workforce since the 20<sup>th</sup> century (Fernández, 2013; O'Neil et al., 2008). Correspondingly, within the South African context the global transformation of women's rights accompanied by affirmative action policies has propelled formal career development of women (Kayi, 2013; Rammutla, 2008). Thus, this dynamic transition of work spaces has propelled the consideration of gender in career development research, especially against the background whereby the foundational theories referenced in this research study were mostly deduced from male samples.

#### 1.1.2 Research Context

Both identity and career maturity do not occur in a vacuum, but are instead greatly influenced by context. However, according to Khapova and Arthur (2011), contextual factors are best explained by the sociological perspective/s, but since they play an important role in the outcomes on the variables of interest they cannot be disregarded (Myeza, 2015) and thus warrant at least acknowledgement. One of the identified social aspects to identity development is the element of culture. McLean et al. (2017) make mention that the study of identity development has commonly omitted the cultural context. More so, the South African cultural context needs to be afforded considerable interest in this research study against the backdrop in which this context is unique in terms of diversity and possibly different to the Western, Eurocentric culture contexts which have informed most of the primary theories referenced in this research (Matshabane, 2016; Myeza, 2015; Stead & Watson, 1998a; Watson, 2019).

#### 1.2 Research Rationale and Aim

The relationship between identity status and career maturity has previously been explored by researchers such as Salami (2008) and U'Ren (2017). However, no studies investigating a relationship between these variables could be located in the South African context. Instead, retrieved studies such as that of Ghofur et al. (2020), Mubiana (2014) and Seane (2017) were utilised, which explored these concepts individually or in relation to other variables other than those of interest in this research study. Against the background recounted, it is evident that there is a gap in the South African context to conduct such a research study. Moreover, Salami (2008) proposes that one way to expand understanding of the nature of career maturity is by exploring its relation to the psychosocial constructs of identity and gender.

Therefore, the aim of this research study is to explore the relationship between career maturity and identity in male and female adolescents in the South African context.

The following questions were investigated:

- 1. Are there significant differences in identity status and career maturity between male and female adolescents?
- 2. Can identity status explain a significant amount of variance in career maturity?

#### 1.3 Overview: Theoretical Frameworks

In this section of the chapter, the foundational theoretical frameworks referenced in this research study are highlighted in a summary form. Each of the primary variables, namely identity status and career maturity are underpinned by more than one theory.

To build a base for the variable of identity development, the Psychosocial Development
Theory by Erikson and Identity Status Theory by Marcia are utilised. Erikson is considered a
pioneer in identity development literature and has served as a reference for many
conceptualisations of identity, while Marcia's theory is one which greatly expanded the
literature on identity formation deriving from Erikson's theory (Crocetti, 2017). Thus, for this
research study the Psychosocial Development Theory by Erik Erikson (1968, 1974, 1980)
provides the base literature on the importance of identity, particularly within the
developmental phase of adolescence, while James Marcia (1966, 1980) provides literature on
the processes which extrapolate on how individuals develop the identity.

The Psychosocial Development Theory is well suited for this research study as Erikson built a theory from a psychosocial approach, having described identity formation as stemming from the interplay between the individual biology, psychology, and social context

and response within a historical context (Kroger, 2005). Furthermore, this theory considers identity from a developmental perspective while simultaneously recognising the role of social contexts (Erikson, 1968). Thus, this is well suited for this research study, as it encourages research to not only investigate identity development from a developmental perspective, but to consider the inherent contextual factors as well. Overall, Berzonsky (2008) concludes that Erikson's contributions were impactful, insightful and innovative to the scientific enquiry on the subject of identity development.

The Identity Status Theory by Marcia (1966) is useful in this research, as it brings insight into how identity develops rather than only reporting that it occurs within a specific developmental phase. This theory builds and progresses identity development literature by elaborating on Erikson's views (Meeus et al., 1999). However, this is not a developmental model; instead, it describes transitions in the form of identity statuses (Waterman, 1982). The identity statuses are as follows: moratorium, foreclosure, diffusion and achievement identity status, which are based on the extent of exploration and commitment which has taken place (Meeus et al., 1999). For instance, achievement identity status is characterised by a period of self-exploration and eventually commitment. Moratorium identity status is characterised by ongoing self-exploration with no commitment taking place. Foreclosure identity status is characterised by commitment which happens in the face of minimal to no self-exploration having taken place. The diffusion identity status is characterised by commitment in the absence of self-exploration. Berzonsky and Adams (1999), in re-evaluating this paradigm, concluded that the identity status paradigm is certainly useful for studying identity formation during the developmental phase of adolescence.

For career maturity three theories are referenced. First is the Career Development Theory by Donald Super (1955), which represents the roots of the construct of career maturity (Naidoo, 1998), thus discussions on career maturity cannot exclude this theory. Super's theory rests on the premise that career is not a one-time event but is instead an ongoing process which unfolds in a series of developmental stages. Furthermore, each developmental stage is accompanied by vocational tasks which require career maturity in order to be mastered (Patton & Lokan, 2001). Initially, Super (1942) introduced this term as vocational maturity, wherein it was conceptualised as "the place reached on the continuum of vocational development from exploration to decline" (Super, 1955, p. 153). Later, this concept was defined as an "individual's readiness to cope with the developmental tasks (for) that stage of development" (Super, 1990, p. 213). According to Super, adolescents are in the developmental phase of exploration, which entails learning about themselves in relation to their interests and abilities and overall development of the self-concept (Super, 1957). The vocational task accompanying this developmental phase is crystallisation, which is characterised by planning and the development of a tentative occupational goal, all of which require career maturity (Super, 1957).

Secondly, the Career Maturity Model by John Crites (1976) is referenced as it expands knowledge in vocational psychology, having brought a distinction between career choice content and the career choice process (Busacca & Taber, 2002). The career choice process dimension is the backbone of career maturity (Crites, 1973), categorised into two group factors, namely: career choice attitudes and career choice competencies. The attitudes subgroup encapsulates the response tendencies which moderate choice behaviours and competencies, while the competencies subgroup relates to the cognitive processes such as problem solving relating to vocational decision-making (Busacca & Taber, 2002). In essence,

Crites conceptualised the initial dimensions of career maturity and expounded these into affective and cognitive dimensions (Dodd, 2013; Shukla, 2001).

Lastly, the theory of Career Construction by Mark Savickas is also well suited for this research study, as it presents a contemporary perspective of careers (Savickas, 2005). One of its primary tenets, *career adaptability* is commended, as it reflects the post-modern perspective of career maturity (Johnston, 2018). Furthermore, it is well suited for this research study, as it is applicable in a multicultural society such as South Africa (Savickas, 1997, 2005). The progressive perspective in this theory is reflected in the proposal to replace career maturity with career adaptability, which is more reflective of modern career dynamics. Career adaptability is defined as "an individual's readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas" (Savickas, 2005, p. 51).

# 1.4 Overview: Research Methodology

In this section of the chapter, a brief overview of the methodology implemented is provided. An extensive discussion will be carried out in the methodology chapter of this research study. The primary goal is to explore the relationship between identity status and career maturity in male and female adolescents in South Africa. In order to achieve this goal, a non-experimental-type, quantitative approach with correlational and criterion group designs was employed. Therefore, the data was collected in a systemic and objective manner with no manipulation of variables while simultaneously analysing similarities and or differences between the selected groups.

A non-probability, convenience sampling approach was utilised to select the sample from the identified population. The final sample comprised adolescents selected from the Mangaung area in the Free State province, which is situated in central South Africa (Statistics South Africa, 2020), within the specified age criterion between the ages of 14 and 21. The criterion is necessary, as the ages demarcating the adolescence developmental phase are variable in the various sources.

Data collection was carried out using a range of self-report questionnaires. First, the biographical questionnaire was used to obtain biographic information regarding the participants such as gender, age, home language and the aspired career choices. To measure identity status, the original version of the Objective Measure of Ego Identity Status (OMEIS) by Adams et al. (1979) based on Marcia's theory was utilised. In order to measure career maturity, the Career Maturity Inventory (CMI) by Crites and Savickas (n.d.), as cited in Savickas and Porfeli (2011) was used.

To analyse the collected data, descriptive statistics was carried out to obtain information on the biographical characteristics of the sample, as well as the participants' scores on the various measures (Maree & Pietersen, 2007). To answer the two research questions, two types of inferential statistics analyses were used, namely a multiple analysis of variance (MANOVA) and regression analyses (Maree & Pietersen, 2007). The necessary and important ethical considerations were taken into account and final clearance was granted by the Psychology Department at the University of the Free State.

# 1.5 Delineation of Chapters

Chapter One: The aim of this chapter is to orientate the reader to the main facets of the research study. It commences by providing background information on the key variables of interest, followed by a brief discussion on the applicability of the theoretical frameworks anchoring this research study. A preview of the research design and methodology utilised in gathering and analysing data is presented. The chapter finally concludes with the delineation of each of the chapters contained in this research study.

Chapter Two: The second chapter of this research study is the first of two literature review chapters. This chapter mainly focuses on reviewing literature on the construct of identity development in adolescence. It commences by conceptualising identity by consulting the various definitions of adolescence as well as discussing the relevant domains of development. This is followed by a narrowed focus on the psychosocial task of identity development. Additionally, the theoretical frameworks applicable for this construct in this research study are considered. The theoretical frameworks are discussed in relation to their foundational tenets and the application thereof, as well as considering their shortfalls.

Moreover, the development of identity status in the South African context is discussed. In line with the goals of this research study to consider gender in identity status development, relevant literature is also reviewed.

**Chapter Three:** The third chapter of this research study is a continuation of the literature review with a particular focus on the construct of career maturity. It begins by defining and discussing the foundational concepts which directly link to career maturity. This is followed by referencing the various definitions of career maturity existing in current literature, before further anchoring this construct in various theoretical frameworks. Each theoretical

framework is discussed in terms of its inception and foundational tenets while highlighting its shortfalls. Thereafter, career maturity within the adolescence development phase is considered. As this research study seeks to explore the effect of gender in career maturity, available literature in this regard is explored. A discussion on the development of career maturity in the South African context is included. The chapter finally concludes with a key discussion which seeks to expound on the possible relationship between identity status and career maturity.

Chapter Four: The primary focus of this chapter is to thoroughly discuss the methods utilised in the collection and analysis of data. The subdivisions of this chapter include deliberations on the research approach and design, sampling methods, and methods of data collection and data analysis that were used in the study. In each subdivision the discussion centres on the rationale for the use of a particular method as well as its disadvantages in relation to the primary purpose of this research study. The biographical dynamics of the final sample obtained are also tabulated and briefly discussed in this chapter. The applicable ethical considerations are mentioned and discussed.

Chapter Five: The fifth chapter of this research study focuses on the results obtained. The chapter is divided into two distinct yet interlinked sections. The first section contains tables of the various results obtained by carrying out the necessary analyses. It begins by tabulating the applicable descriptive statistics, which is followed by tables relating to inferential statistics. The second section of this chapter is focused on broadly discussing the tabulated results according to the layout of the first section in relation to the two primary questions underpinning this research study.

Chapter Six: This is the final chapter which summarises the key findings in relation to the primary purpose of this research study, which was to explore the relationship between identity status and career maturity in male and female adolescents in the South African context. Final conclusions are made based on the findings against the background literature. Furthermore, the various methodological and literature limitations applicable to this research study are highlighted. In response to the limitations identified, recommendations to mitigate these shortfalls are discussed.

# 1.6 Chapter Summary

The primary aim of this chapter was to orientate the reader to this research study. The chapter began with a fitting quote, which well captured the essence of this research study. Thereafter, background information on the variables of interest, namely identity status and career maturity against the background of gender and the context of South Africa were discussed in conjunction with the rationale. Subsequent theoretical frameworks anchoring these constructs were briefly highlighted. The methods employed for data collection and analyses were also briefly discussed. Lastly, the chapters making up this research study were delineated before concluding the chapter with a brief summary.

# CHAPTER 2: IDENTITY DEVELOPMENT DURING ADOLESCENCE IN THE SOUTH AFRICAN CONTEXT

The second chapter of this research study provides an overview of the key literature on the variable of identity development, especially during the phase of adolescence in the South African context. The chapter begins with defining adolescence, followed by further contextualisation of adolescence by discussing the various domains of development including the physical, cognitive and psychosocial domain. The chapter then proceeds with a discussion on the psychosocial task of identity development as well as the theoretical foundations applied in this research. This is followed by a discussion of the factor of gender in identity development as well as a discussion on the developmental context of South Africa. The chapter concludes with a brief summary.

# 2.1 Defining Adolescence

Discussions about adolescents are best commenced with defining the concept of adolescence (Hazen et al., 2008). However, such an undertaking is theoretically challenging due to how multifaceted this developmental phase is along with the difficulty to precisely determine its beginning and its end (Jaworska & MacQueen, 2015; Marcia, 1980), as an agreed upon definition of adolescence remains a conundrum (Sawyer et al., 2018), despite reports that this term has been in existence since approximately the 15<sup>th</sup> century (Lerner & Steinberg, 2009; National Academies of Sciences, Engineering, and Medicine, 2019). The initial roots of the concept of identity originate from the Latin term 'adolescer', which in English translates to the term 'grow up' (Sawyer et al., 2018).

The earliest academic definition of identity is traced to Hall (1904), who defines adolescence as the developmental period from approximately the age of 14 to 24. Johnson et

al. (2011), Kubeka (2010) and Louw and Louw (2010) explain adolescence as the period of transition between childhood and adulthood without delineating the precise age ranges. Alternatively, other academics define adolescence through the lens of the various core developmental tasks. For instance, Steinberg (2014) outlines adolescence as the years between the onset of puberty and the establishment of social independence. Satterthwaite et al. (2014) define adolescence as a course of marked changes in behaviour, emotion and cognition. The demarcation of adolescence by developmental tasks and or transitional activities in the South African context can be challenging due to the varying experiences as a result of growing up in post-apartheid society (Venn, 2010).

On the other hand, academics such as Paus (2005) take an evolutionary position in defining adolescence as the final phase of an extended pattern of growth and maturation, having emerged late in evolution and which may serve as an advantage by providing plentiful time for the maturation of the brain and its cognitive apparatus before it reaches the full potential of a young adult. Bjorklund et al. (2016) concur that adolescence is primarily a period for the attainment of productive status. Likewise, AlBuhairan et al. (2012) and Choudhury (2010) summarise adolescence as a cultural, modern world invention which has emerged as a result of modernisation and industrialisation, to the extent that De Boeck and Honwana (2005) contend that the term 'adolescent' is only recently recognised in the African context.

In particular, for the South African context there is a unique dilemma in conceptualising adolescence due to the dynamic of multiculturalism, as definitions of adolescence can also primarily reflect cultural formulations (Hazen et al., 2008). Therefore, it is difficult to come to an agreement of what constitutes adolescence in the South African context (Venn, 2010), as

denotations ascribed to either the physical maturations and or social definition of adolescence may differ from one culture to another (Curtis, 2015). For instance, collectivistic cultures tend to favour a collectivistic social perspective of adolescence (Oyserman & Lee, 2008), while within Western cultures, individualistic components of identity such as autonomy are more favoured (Lee et al., 2009; Wang et al., 2019). Notably, the commonly referenced conceptualisations of adolescence emanate from the 20<sup>th</sup> century, which generally remain rooted in the normative Western ideals of adolescence (Choudhury, 2010). Nevertheless, in the 21<sup>st</sup> century the conceptualisations of adolescence will vary across time and place (National Academies of Sciences, Engineering, and Medicine, 2019).

Patently, there is little consistency in the way adolescence is defined (Curtis, 2015; Peper & Dahl, 2013). This dynamic is also prevalent when it comes to demarcating an age range for this developmental phase. For example, Peper and Dahl (2013) suggest that adolescence ranges from age 10 to 25 years, while the World Health Organization (2014) considers the age range for adolescence to be from age 10 to age 19. Other theorists such as Arnett (2000) have proposed a differential stage named emerging adulthood for the age ranges of 18–25 instead of considering it to be part of late adolescence. Overall, there is minor consistency in denoting the precise age range for adolescence across professional sources of information (Meschke et al., 2012). The variations and inconsistency in this regard are due to the blurred boundary between adolescence and young adulthood (National Academies of Sciences, Engineering, and Medicine, 2019), which can further generate problems in the construction of adolescent research (Curtis, 2015).

To further contextualise adolescence, the next section of literature deliberates on the core domains of adolescents' development. Interdisciplinary perspectives are best suited to

characterise adolescent development (Susman & Rogol, 2004), especially since human development is not a distinct event (Shaffer & Kipp, 2010). Rather, it is shaped by both biological and environmental factors, hence holistic understanding of development is best achieved by conceptualising a changing person in a changing environment (Sigelman & Rider, 2012), as adolescents cannot be well understood if only considered in parts (American Psychological Association, 2002).

#### 2.2 Domains of Adolescence Development

The onset of adolescence is difficult to precisely determine (Hazen et al., 2008), however, it is well established that the transition into adolescence brings about a host of physical, cognitive, social and emotional changes (McBride Murry et al., 2011). Each domain of development has its own specific focus, but the domains are interrelated and constantly interact, as human development is a result of multiple forces (Berk, 2016; Hazen et al., 2008). Moreover, development in the various domains does not necessarily occur simultaneously (Meschke et al., 2012). In addition, individual differences may be noted amongst the adolescents in the commencement of or changes in the various domains of development (Hollenstein & Lougheed, 2013).

The marked changes in the various domains are also fairly divergent between males and females (Lenroot & Giedd, 2010). The differences are attributable to the diverse effects of growth and functioning across the various brain structures (Goddings et al., 2014).

Ultimately, the changes in these domains interact with the environment to mould and shape the adolescents in their journey of development (National Academies of Sciences, Engineering, and Medicine, 2019). The wide-ranging changes in domains of development require the adolescent to obtain new ways to accommodate and negotiate these changes, such

as accommodating complex social settings and forming an integrated identity and career choice (Pellerone et al., 2015).

# 2.2.1 Physical Domain of Development

The physical domain of development pertains to bodily changes regarding overall biological maturity and the function of the physiological systems (Caskey & Anfara Jr., 2007). Physical development during adolescence is dramatic (Fisher & Eugster, 2014; Sigelman & Rider, 2012), as the body undergoes a great deal of change when compared to the previous developmental stages (Caskey & Anfara Jr., 2007).

One of the major physical characteristics signalling the beginning of adolescence is puberty (Blakemore et al., 2010; Shaffer & Kipp, 2010), which is initiated by the central complex metamorphosis biological processes (Hayward, 2003; Satterthwaite et al., 2014). Puberty contributes to a variety of physiological processes (Bello et al., 2017; Dorn, 2006) primarily in terms of growth spurt and sexual maturation, which in turn lead to reproductive capability (Gajdos et al., 2009; Fisher & Eugster, 2014). These pubertal processes are primarily initiated by genetic and biological factors, but environmental influences are also known to have an impact (Hazen et al., 2008; National Academies of Sciences, Engineering, and Medicine, 2019). Environmental influences manifest at the micro level of the adolescent's life such as stressful life events, amount of body fat, presence of enduring illness and availability of nutritious diet, which may be brought on by interactions at the macro level (APA, 2002; Bronfenbrenner, 1979).

In addition, the vast physical changes initiated during adolescence have psychological implications for the different genders. In males, a positive body association has been found when the bodily changes occur, while in females there tends to be a negative body association

(Kubeka, 2010). Despite the gender differences in the reaction to the onset of puberty, the psychological differences amid early and late maturing adolescents become less and more mixed in nature by adulthood (Herting & Sowell, 2017).

# 2.2.2 Cognitive Development

Cognitive development relates to the construction of thought processes such as remembering, decision-making and problem solving (Levine & Munsch, 2015; Sigelman & Rider, 2012). Cognitive abilities are facilitated by the maturity of the brain and nervous system (Piaget, 1970). The onset of puberty is also associated with specific structural and functional expansions of the brain (Goddings et al., 2014), which in turn precipitate changes in the thought processes of adolescents (Blakemore et al., 2010; Steinberg, 2005).

The cognitive changes in adolescence are well captured in Piaget's (1936) theory of cognitive development. Piaget (1936) proposed that cognitive development takes places in a series of stages and adolescents are in the cognitive stage of formal operational thinking, which is characterised by abilities to execute abstract, hypothetical thinking, and inductive and deductive reasoning (Piaget, 1936). During this stage as well, problem solving is systematic and organised through a set of logical operations such as the ability to inverse, negate, reciprocate and correlate (Inhelder & Piaget, 1958). There is also development in executive functioning wherein improvement in inhibition of impulses, self-regulation and a synchronisation of affect and cognition are noted (AlBuhairan et al., 2012). The attainment of these cognitive abilities will empower the capacity for the developmental activities of exploration and commitment in adolescence (Pellerone et al., 2015).

Over and above the brain's structural and functional changes leading to improved cognitive functioning in adolescence, the psychosocial factors of culture and gender have been implicated. Vygotsky (1978) proposes that cognitive development is intimately linked to an individual's culture, implying that there is a pattern of species-typical brain and mental abilities consistent with the demands and values of a specific culture. As a result, human cognition also reflects the beliefs, values and tools of intellectual adaptation transferred to individuals by their specific culture (Vygotsky, 1978). Gender is implicated through the well-recognised gender differences in brain structure and the course of brain development which occur during adolescence (Lenroot & Giedd, 2010; Satterthwaite et al., 2014). Thus, it can be concluded that some of these differences would have implications in how males and females negotiate tasks associated with cognitive development, however, gender differences in cognitive abilities remain an area of controversy (Ardila et al., 2011).

# 2.2.3 Psychosocial Development

The American Psychology Association (2020) dictionary references the term psychosocial development as one which "describes the intersection and interaction of social, cultural, and environmental influences on the mind and behaviour". Sadock et al. (2004) operationalise psychosocial functioning as the aspect of human development involving an individual's psyche, behaviour and their relationships to others and society at large. The National Academies of Sciences, Engineering, and Medicine (2019) and Sanders (2013) delineate psychosocial development in adolescence as a series of variable, complex, integrative tasks which centre on issues such as autonomy, establishing an identity, future orientation focus, refining personality, interpersonal skills and roles assumption (Erikson, 1963, 1982; Jaworska & MacQueen, 2015; Shaffer & Kipp, 2010; Sigelman & Rider, 2012), which are fostered by both biological maturations and the social demands of a given context.

Autonomy relates to an adolescent's increased ability to think, feel and make decisions independently (Sanders, 2013). This is an empowering shift for adolescents to autonomously make decisions and take care of themselves (Kumari, 2016). Autonomy relates to an adolescent's increased ability to think, feel and make decisions independently (Sanders, 2013). It is hypothesised that the overall cognitive, emotional and behavioural maturity propels adolescents to rely less on their caregivers and parents (McElhaney et al., 2009). However, cultural variations are noted in this regard, as autonomy is recognised as a core value in more individualistic cultures, while the opposite, interdependence is more encouraged in collectivistic cultures (National Academies of Sciences, Engineering, and Medicine, 2019).

Another prime task of psychosocial development in adolescence which is closely linked to autonomy is the prioritising and nurturing of social relationships over and above parents or family (Hazen et al., 2008; McElhaney et al., 2009). The increased autonomy impels the adolescents to focus on the social and developmental tasks such as forming relationships with peers and romantic partners. It is therefore not uncommon to witness peer opinion, advice and approval being preferred to that of parents during this developmental phase (Sanders, 2013). Additionally, there is an increased focus of self-image in adolescence which is also closely linked to autonomy and group cohesion and tends to bring about behaviours geared towards using enhancements such as clothing, hairstyles, language and other accessories in an attempt to gain approval within the peer group (Gestsdottir et al., 2017; Grogan, 2010). These relations can in some instances positively shape adolescent character (Brown & Larson, 2009). Similarly, those adolescents who are unable to identify with other peers may face

significant psychological difficulties during this period (Duchesne et al., 2017; Sanders, 2013).

Furthermore, the overall cognitive operational thinking fosters future orientation, which relates to the images adolescents hold about their futures reflected in their hopes and fears (Liauw, 2013). This psychosocial task is diligently associated with positive adolescent development outcomes (Johnson et al., 2014), as it provides a foundation for the setting and planning of goals (Seginer, 2019). Interlinked to the other tasks of psychosocial development such as formation of identity, the refining of sexual, moral and religious values and the conceptualisation of realistic goals towards their careers are actively evident in adolescence (Liauw, 2013; Sanders, 2013).

In linking these prime tasks of psychosocial development in adolescence, the next section of literature focuses extensively on the psychosocial task of identity development. This is of importance, as the establishment of an identity in adolescence is considered to be one of the primary core tasks of psychosocial development, not only in adolescence but throughout the course of a lifespan (Erikson, 1968). This process of individuation in adolescence is inevitable, as adolescents increasingly come to see themselves as separate from parents and establish their own individual identities (Blos, 1967).

#### 2.3 Identity Development in Adolescence

Identity is a multidimensional concept, as it is personal as much as it is contextual (Adams & van de Vijver, 2017), thereby making it difficult to operationally and or theoretically define (Côté, 2009). Overall, definitions of identity vary within and across disciplines, either emphasising personal or social aspects of identity (Vignoles, 2018). It is understood that this

term originates from the Latin noun '*identitas*', which refers to individuals' mental image of themselves while retaining some sort of sameness with others in some way, encompassing values, principles and roles which an individual has adopted as their own (Steensma et al., 2013).

Furthermore, identity is comprised of at least three dimensions, namely: personal, relational and social identity, each comprised of its own many components (Adams & van de Vijver, 2017). All these forms of identity can operate concurrently (Carter, 2014). Ultimately, the term identity can accentuate the various facets of human self-definition (Côté, 1996). For instance, social identity encapsulates the individual's position(s) in a social structure or groups of categories and also provides opportunity for individuals to have a sense of unity with others and even evoke common bonds (Carter, 2014).

Personal identity focuses on the tangible aspects of individual experience as informed by their interactions and various institutions of contact, which in turn fosters a sense of individuality (Carter, 2014). According to Crocetti et al. (2013), personal identity is in fact a form of ego identity, which essentially captures the "fundamental subjective sense of continuity which is characteristic of the personality" (Côté, 1996, p. 420). Soldatova and Shlyapnikova (2013) describe ego identity as the deep personality structure which executes many functions including supervising, controlling and evaluating, all aimed at preserving the self-identity, continuity and integrity of the individual, especially during periods of systemic changes in personality structure and other normative crises. Furthermore, this dimension of identity emphasises components such as autonomy, personal needs, values, goals as well as aspirations (Schwartz et al., 2011).

Identity development is a key developmental task for adolescents (Erikson, 1968; Pellerone et al., 2015; Verschueren et al., 2017), which results from the interaction of personal, social and contextual factors which contribute to define the person as a complex being (Adams et al., 2011). It is a process of attaining a firm and coherent sense of who an adolescent is, where they are heading, and how and where they fit into society (Erikson, 1968). Kłym and Cieciuch (2015) perceive Erikson as describing identity as a response to the question "Who am I?" According to Johnson et al. (2011) and Luyckx et al. (2010), identity development is the process of integrating childhood identification into the greater self-determined set of ideals, values and goals.

Identity development is primarily an individual process which takes place through exploring and committing to self-definition and discovery of one's ideological position, sexual orientation and vocational path (Buckingham, 2008; Erikson, 1950; Luyckx et al., 2005; Marcia, 1980; Schwartz et al., 2011; Siwundla, 2011; Steensma et al., 2013). Identity development is influenced by a variety of external and internal factors such as gender roles, culture, interpersonal relations, history, temperament and other personality dimensions (Erikson, 1964, 1965, 1968; Pellerone, et al., 2015).

Furthermore, the process of identity development is unpredictable, non-linear and at times challenging (Sanchez et al., 2014), but it remains essential and instrumental during both adolescence and throughout the course of a lifespan. For example, developing this integrative capacity of the self is important to the remainder of the developmental stage, as it provides a sense of purpose and direction (Arnett, 2000). It further serves as the foundation for effective coping and adaptation to the demands and challenges of daily life (Erikson, 1968). Otherwise, failure by the adolescent to explore and establish their identity will result in self-doubt and

role confusion, which may further lead to engaging in self-destructive activities (Erikson, 1964, 1965). Establishing a stable identity in adolescence paves the path for positive psychological adjustment as well as the development of deep and trusting emotional commitments which may last a lifetime (Shaffer & Kipp, 2010). Overall, identity is implicated in the structure of personality maturity (Soldatova & Shlyapnikova, 2013).

# 2.4 Identity Development Theories

Identity development is imperative, thus individuals need to engage in the process of individuation to form their identity and function as an independent member of society (Lategan, 2015). The adolescence developmental phase is primarily for the development of identity (Erikson, 1968; Pellerone et al., 2015; Verschueren et al., 2017). Various theories exist to explain the process of identity formation focusing exclusively on content, while others place emphasis on the structure and processes and others attempt an integrated approach (van Doeselaar et al., 2018). In this section, two theories which seek to extrapolate on the process of identity development are discussed.

# 2.4.1 Erikson's Psychosocial Development Theory

Erik Erikson is one of the early theorists who considered psychosocial development over the course of the lifespan, as elucidated in the Psychosocial Theory of Human Development. This theory considers various biological, psychological and social aspects of development (Anderson, 1993), in which development is then explained as a naturally unfolding process through a series of eight developmental stages, influenced by epigenetic factors (Erikson, 1950, 1959, 1964, 1965, 1968, 1975). Each stage of psychosocial development is characterised by a unique crisis which is dictated by biological maturation and the social demands of a given social context. Furthermore, each crisis is composed of two opposing

dimensions, both of which must be experienced in order to arrive at a suitable resolution (Erikson, 1950, 1968). Successful resolution of each crisis is achieved when there is synthesis between the two opposing dimensions characterising each stage (Erikson, 1968). Notably, each society provides its members at each stage with opportunity to master these developmental crises; this opportunity Erikson termed psychosocial moratorium (as cited in Côté & Levine, 1987).

The resolution of the crises facilitates development by leading to the growth and attainment of emotional and cognitive skills known as virtues (Fleming, 2004; Siwundla, 2011), which are not only beneficial for the resolution of the next crisis in the process of development (Erikson, 1963), but also purportedly play a role in the individual's overall psychosocial efficacy and the development of personality (Beyers & Seiffge-Krenke, 2010; Munley, 1975). Notably, any interference in the critical points may lead to the possibility of the development of core pathology (Erikson, 1964, 1968).

Moreover, all psychosocial stages have what is termed *critical periods* (Côté & Levine, 1987). The first critical period is when the crisis is ensuing and the second critical period is brought on by the attempt to implement the psychosocial gains made as a result of resolving the crisis (Erikson, 1980). In between these critical periods there may be increased levels of confusion experienced, precipitated by the pulls associated with the polarised nature of psychosocial crises (Côté & Levine, 1987). The confusion is, however, not necessarily pathological and is contextualised as the attempt to constructively work through the crisis, and will only transcend to pathological once it loses this social function (Erikson, 1975). Consequently, the second critical period can come into play once the confusion is overcome.

Nevertheless, this does not imply complete dissolution of confusion, but instead a significant reduction that is no longer distressing for the individual (Côté & Levine, 1987).

Accordingly, the fifth stage of psychosocial development is characterised by the crisis of *Ego Identity* versus *Role Confusion* (Erikson, 1950), which occurs during the developmental phase of adolescence (Erikson, 1963, 1968). Erikson's perspective of identity is understood from the ego psychology perspective stemming from the era of the 1950s and 1960s (Wallerstein, 1998). This primary school of thought is reflected in the definition provided: "Ego identity is encompassing of a sense of temporal-spatial continuity and the arrangement of the self-concepts which unify individual's experiences in the social world" (Erikson, 1964, pp. 95-96). This implies that the ego has capacity to aid the adolescent to select within the various domains of identity and tune into their social environment while keeping its defences against anxiety (Erikson, 1963). Ultimately, these ego selected characteristics are then gathered and subsequently included by the ego to form one psychosocial identity (Erikson, 1968).

Erikson as cited in Côté (2018) proposes that identity crisis can be characterised by the severity, prolongation and aggravation factors. An identity crisis is said to be severe when an individual's experience of identity confusion overpowers the sense of ego identity. A prolonged identity crisis occurs when there is repositioning of childhood and adolescent identifications linger for an extended period of time, while an aggravated identity crisis occurs when the continuous efforts to resolve the identity crisis are unsuccessful.

Additionally, for an identity crisis to noticeably occur certain prime conditions must prevail (Erikson, 1959, 1968, 1975). Firstly, a certain level of cognitive maturity and physical growth towards adult structure and puberty must have occurred. Additionally, certain cultural

pressures emanating from social class, subculture, ethnic background and or gender have to be driving the individual towards ego re-synthesis, thus the identity crisis is instigated by the individual's biological readiness and a given society's pressure (Côté & Levine, 1987).

Fidelity is the virtue attained upon resolution of the identity crisis (Erikson, 1982, 1968). The attainment of fidelity virtue is empowered by receiving proper encouragement and reinforcement in the process of personal exploration (Markstrom et al., 1998). Such adolescents will emerge with a resilient sense of self and feeling of independence and control, which is what fidelity encompasses (Erikson, 1963). Conversely, failure to commit to a reasonable identity tends to result in further confusion and ambiguity over one's self concept and one's role in the world and results in the core pathology of *repudiation* (Erikson, 1968). The associated functional consequences include becoming depressed and lack of self-confidence through possibly embracing what Erikson termed a negative identity (Erikson, 1963).

Erikson's theoretical contributions were however not without criticism. There is criticism that Erikson's theory is too vague to successfully encapsulate the development of identity, particularly in adolescence (Shaffer & Kipp, 2010). Additionally, Erikson is criticised for failure to elaborate on how identity develops other than providing its stages (Sigelman & Rider, 2012). Furthermore, the use of the term "stage" in his theory is perceived to imply identity as inflexible, stable and externally defined to the individual (Torres et al., 2009). Berzonsky (2008) acknowledges that Erikson provides an otherwise rich theory of identity development, but notes that this theory falls short when it comes to an explicit set of empirical operations.

### 2.4.2 Marcia's Ego Identity Status Paradigm

Marcia (1964, 1966) proposed the Ego Identity Status Paradigm. According to Berzonsky and Adams (1999), this is a *methodological device* which serves to both operationalise and practically examine the concept of identity as proposed by Erikson (1968). Nonetheless, the identity paradigm is not a developmental model (Bosman & Kunnen, 2001), but rather an approach which demonstrates a typology of the outcomes of the identity crisis rather than providing the stages of this process (Kubeka, 2010; Marcia, 1964, 1966). The focus is on the underlying cognitive behavioural markers of the identity formation process (Crocetti et al., 2007).

Marcia was influenced by ego psychology and went on to define identity as an internal self-structure of vibrant organisation of an individual's beliefs, drives, abilities and history. This internal self-structure is also dynamic and continuously evolving as new elements are continuously added and or discarded, thus shifting the gestalt over time (Marcia, 1967, 1980). Additionally, similar to the sentiments of Erikson (1968), the formation of an identity is precipitated by an identity crisis (Marcia, 1966), which is then overcome through orthogonal processes of exploration and commitment. Exploration is the crisis period of the formation and relates to the active questioning and weighing of identity alternatives, the evaluation of past beliefs and consideration of choices, all in the quest to attain a coherent sense of self (Marcia, 1966, 1980).

Commitment is the added process of this journey, which refers to the degree of personal investment exhibited by an adolescent following the selection of a relatively firm choice after engaging in important activities towards implementing those goals, choices, values and beliefs (Crocetti et al., 2007; Marcia, 1966). The identity processes of exploration and

commitment are neither linear nor definite processes (Steensma et al., 2013). Notably, Marcia (1980) mentions that synthesising these identity constituents requires letting go of many childhood ideologies often based on phantasy, and for some this letting go is anxiety provoking.

Based on the multidimensional identity process captured by the exploration and commitment processes, Marcia (1966) derived four identity statuses, each of which represents a juxtaposition of levels of exploration and commitment (Bosman & Kunnen, 2001) in a number of content domains. The identity statuses are: identity diffusion, identity foreclosure, identity moratorium and identity achievement. In Marcia's (1966, 1980) identity status paradigm, the statuses are operationalised as an intentional deliberation of alternative goals, beliefs and values which represent the identity crisis, while the consolidation of these deliberations is expressed in commitments. In essence, these identity statuses represent developmental maturity of the process of identity development (Bosman & Kunnen, 2001).

Commencing with the diffused ego identity status, this reflects the adolescents who have not engaged in the process of exploration and have also not made any clear and sound commitments (Luyckx et al., 2005; Marcia, 1966), hence it is considered the least mature of all the ego identity statuses (Côté & Schwartz, 2002). The lack of commitment may be as a result of disinterest in obtaining personally meaningful adult roles and values (Steensma et al., 2013), otherwise an adolescent may not yet have experienced the identity crisis (Kubeka, 2010). The diffused identity status has an association with apathy concerning school and relationships and detached family relationships (Marcia et al., 1993).

The foreclosed ego identity status applies to adolescents who have made some form of commitment in the face of no exploration having taken place (Côté & Schwartz, 2002; Luyckx et al., 2005). Commitment against the lack of exploration may have been imposed by the different systems and institutions of society (Kubeka, 2010), which possibly explains why it is commonly associated with authoritarian parenting values as well as intimate family relations (Marcia et al., 1993). It is not uncommon to witness this status in early adolescence (Steensma et al., 2013).

The moratorium ego identity status represents an increasingly desirable identity status (Côté & Schwartz, 2002), as adolescents classified according to this status are said to be in the process of exploration of various alternatives with the exception that there is no arrival at set commitments (Luyckx et al., 2005; Marcia, 1966). Thus, with the identity crisis heightened it is not uncommon to witness an increased psychological condition of anxiety, as no resolution has been reached. Other crude notable behavioural changes as a result of increased awareness include ambivalent family relations (Marcia et al., 1993) and rebellious self-conduct (Kubeka, 2010). The moratorium ego identity status is commonly noted in late adolescence (Steensma et al., 2013).

The achievement ego identity status is considered to be the most advanced form of identity development (McLean & Pratt, 2006). Adolescents classified according to this ego identity status have resolved the identity crisis after having carefully considered their options before committing (Kubeka, 2010; Luyckx et al., 2005). As such, ideological and occupational commitments are witnessed at this level of identity development (Marcia, 1966). Attributed to these attainments are improvements in cognitive capacity, which allow adolescents to be able to make decisions and explicate their experiences with confidence (Kubeka, 2010). The

improved cognitive capacity may best explain why identity achievement is rare to witness in early adolescence and more frequent in late adolescence and young adults (Marcia, 1980). There are psychosocial benefits which result from the achievement ego identity status including progressive capacity for intimate relationships, psychological adaptability as well as the ability to resist manipulation to self-esteem (Marcia et al., 1993). Essentially, identity achieved individuals are better equipped to handle the possible sudden changes and or bestowed responsibilities in their environment (Marcia, 1966).

Against this background, the following criticisms against Marcia's status paradigm are noted. Côté and Levine (1987) and Schwartz et al. (2015) advocate for the Eriksonian perspective due to the emphasis on the person–context interplay, while Marcia's approach only focuses on classifying the adolescents' identity development process into static categories. Within the status paradigm, considerations of the greater social, historical, biological and familial facets of identity development are not evident (Côté & Levine, 1988). Thus, this theory does not provide perspective or necessary details as to how adolescents come to develop their respective identity statuses (Bosman & Kunnen, 2001). However, other scholars have praised this approach of statuses and have asserted that this approach takes into account earlier means of coping, while also recognising advancement towards more internalised ways of perceiving the self (Torres et al., 2009).

### 2.4.3 Other Relevant Identity Theories

Karaś et al. (2018) note that identity development is one of the topics in contemporary developmental psychology which is frequently researched, thus suggesting that there is extensive literature and many possible theories available to explain this phenomenon.

Galliher et al. (2017) advocate the advancement of scholarship in the field of identity, as it

was previously dominated by the perspective offered by Marcia's identity status model. In this section of the chapter there is a brief discussion of other applicable theories which have expanded literature on identity development.

For instance, the proposal of the process-oriented models came about due to the realisation that the status paradigm's conceptualisation of identity is rather narrow (Luyckx et al., 2007). Thus, the process-oriented models expand identity development literature by focusing on the processes that individuals utilise to develop their identity, instead of merely stating that identity can be categorised into statuses (Karaś et al., 2018).

The social-cognitive perspective contributes to identity development literature by exploring and extrapolating on the social-cognitive strategies which individuals employ to master the process of identity development (Karaś et al., 2018). Therefore, individuals are viewed as self-theorists who utilise different cognitive processes to encode the self-relevant information in order to construct a sense of identity (Berzonsky, 2011) especially by late adolescence, as all the social-cognitive strategies are well developed and thus can be well utilised in this regard (Berzonsky, 1988).

Another model, the Integrative Circumflex of Identity Formation Modes (CIFM) model proposes that identity development can be explained by modes, which are conceptualised as the basic descriptors to capture the different methods of identity formation (Karaś et al., 2018). These base modes are rooted in Marcia's categories of exploration and commitment (Topolewska-Siedzik & Cieciuch, 2018).

There are also narrative approaches which contribute to the understanding of identity development and its maintenance over and above what questionnaires and semi-structured interviews offer (Côté, 2014). This is because the main characteristics of identity take place in a form of a life story (Karaś et al., 2018). The story is created in a manner which takes into account the role of past experiences and their impact on the present self (McAdams, 1988). Furthermore, the life story is constantly revised throughout the course of the lifespan, thus suggesting that identity development is a lifelong task (McLean, 2008).

# 2.5 Development of Identity in the South African Context

Anderson (1993) proposes that explorations into the nature of identity must not only consider biological influences, but equally so the various social and contextual factors. Corresponding are the sentiments by Gaunt and Scott (2017), who state that identities are social products, as even though an adolescent develops their own self-definitions, these definitions do not occur in isolation and are strongly influenced by the realities of the influential social structures.

The foundational theorists referenced in this research have mostly focused on exploring and understanding identity from a psychological perspective (Côté & Schwartz, 2002), however, they have acknowledged that identity development and or formation in adolescence does not occur in isolation and is greatly influenced by the social, cultural and historical context that individuals are based in (Erikson, 1964, 1965, 1968; Marcia, 1993). The range of factors within the broader social context is classified into two major groups: the distal and proximal factors (Bosma & Kunnen, 2001), which have a complex and non-linear yet transactional relationship (Grotevant, 1987; Kroger & Green, 1996). In this research study, effort is extended to investigating the distal factors of *culture* and *history*.

The investigation of the 'culture-identity link' is important in ascertaining the identity of young adults (Côté, 1996). This is particularly the case in this research study, as the group of participants generally hail from cultural backgrounds which are different when compared to the contexts which informed the referenced theoretical frameworks. Notably, the South African context is very diverse, presenting with a host of cultural groups and languages (Adams et al., 2018), thus suggesting it is not a context governed by singular culture principles. In line with this, Adams and van de Vijver (2017) make mention that the African context is multicultural and thus complex to a point where no one group clearly dominates the socio-political, economic and cultural sphere, which is the case of South Africa.

Moreover, South Africa is a society which has experienced and continues to experience many socio-political changes. As Naudé (2017) highlights, societal transformations characterised by multiculturalism, global culture and global economies can influence individuals' identities. Thus, for the South African context, historical, social and cultural dynamics such as globalisation and increased inter-cultural contact (Bornman, 2000) have since evolved compared to the periods of the inception of identity research, thus potentially leading to changes in the nature of identity as previously known (Baumeister & Muraven, 1996).

Culture is a socio-cultural concept (Gupta & Ferguson, 1992). which is multi-layered and is tied to identity development through inexplicable values, beliefs and socially embraced activities (Carter, 2014; Renshaw, 2019). The role of culture in the developmental process of identity is multidimensional. For instance, the initial process of identity development, the *crisis* is typically precipitated by cultural processes of a given context (Erikson, 1968).

Waterman (1993) attests this notion, stating that the initial processes of identity development are chiefly influenced by family cultural factors, but also by the homogeneity of the environment. One such example is found within the Xhosa tribe, wherein a cultural process called 'ulwaluko', which is a Xhosa word referring to male circumcision (Magodyo, 2013), is designed to initiate boys into manhood (Venn, 2010).

The cultural factor is not only limited to the identity crisis, as the delineated cultural beliefs and expectations also play a significant role in the rest of the identity development process. For example, during the active phase of exploration, Erikson (1968) notes that a variety of cultures provide their adolescents with tasks associated with exploration for identity development. Furthermore, Erikson proposed that all societies provide their adolescents with an opportunity to explore their roles without assuming permanent responsibilities; this period is termed the *moratorium* period (Erikson, 1968). However, each context still provides with culturally informed guidance through avenues such as community-based rituals, rites, initiations and apprenticeships to negate this period (Côté, 1996).

The *moratorium* period cannot be left to run indefinitely and identity commitments must take place and once again cultural influences and differences are noted. For instance, within Western and or Eurocentric culture, it is typically expected that the resolution of identity crisis is marked by choice and individuality, representing a choice-based type of identity crisis. In contrast, other contexts are more duty bound and espouse interdependence (Schwartz et al., 2006). In the latter contexts, identity development is not primarily choice based as there are culture-based techniques of conditioning for this social convention, and this is often executed through a high degree of conformity. Essentially, identity development in adolescents is recognised as universal; however, cultural differences in negating this

process are noted and mirror the influences of either individualism or collectivism (Arnett, 2000; Lee et al, 2009; Schwartz & Montgomery, 2002; Stead & Watson, 1998a).

In multicultural societies such as South Africa (Hazen et al., 2008), such unipolar representations of cultural orientation may not be applicable. In actuality, the pluralistic, multi-ethnic and multicultural society of South Africa is likely to precipitate complex and prolonged identity confusion for adolescents as they attempt to negotiate the local and global sources of influences in the processes of exploration and commitment (Arnett, 2002; Kinnvall, 2004; National Academies of Sciences, Engineering, and Medicine, 2019). Thus, assumptions of identity development in a South African context would be more accurately informed if each individual's cultural value orientations are directly assumed rather than making inclusive conclusions (Lee et al., 2009). It is due to such dynamically composed contexts that Yoder (2000) criticises the cross-application of the identity status paradigm, citing that social structure is not clearly defined equally for all adolescents. Thus, attempts to cross-culturally apply the identity status paradigm may not yield correct results.

Additionally, the consideration of the distal contextual factor history is important, as personal and social meanings of identity may be activated by the forces of history over and above culture (Hammack, 2008). Before the period of democracy, South Africa was governed by the colonialism and apartheid systems, which set the stage for cultural hegemony of European ideals leading to cultural deformation for the African population (Abdi, 1999). This was explicitly done through the dislocation of the African culture from its anthropological and social compartments and instead framing it within the context of economic and political relationships (Abdi, 1999). Prior to this socio-political-economic inheritance, it was distinctly noted that the collective identity orientation was more dominant within Black adolescents, as

informed by their respective narrative of collectivism within their ethnic cultures, but also by the regional and or national consciousness of the collective goal to fight the oppression of and gain independence from the apartheid system (Lategan, 2015; Stevens & Lockhat, 1997).

This legacy was inherited in the democratic South Africa post 1994 and has had an unprecedented impact on the identity development processes of the previously oppressed Black population (Abdi, 1999), leading to an identity for the South African adolescents which is complex with unpredictable outcomes (Stevens & Lockhat, 1997). For instance, post-apartheid adolescents who fall within this context are having to define their identities against socio-political labels such as the 'lost', 'liberators', 'criminals', 'comrades', 'privileged' and 'underprivileged' (Venn, 2010).

Additionally, adolescents who identify as African may struggle to form identities which incorporate their traditional values while simultaneously incorporating Western ideals (Venn, 2010), thus leading to a possible dual identity crisis as individuals attempt to navigate the intercultural influences which were not prevalent in the previous political dispensation (Thom & Coetzee, 2004). Ultimately, these historical changes in social and cultural contexts have had an altering impact on the nature and trajectory of identity (Baumeister & Muraven, 1996).

As such, currently, there is a distinct notable shift within the dispensation of democracy when compared to the apartheid era, wherein there is an increase towards the orientation of individualism instead of collectivism, especially among Black adolescents (Stevens & Lockhat, 1997). These authors conceptualise this transition as a 'Coca-Cola' culture, which typically embraces the American individualism, competition, individualistic aspirations and

general worldview. This transition is a confirmation that the development of individual identity is in turn influenced by the dynamics of a given society (Brunsdon, 2017). Evidently, the socio-political shift taking place in the South African context has impacted the established identity status in individuals (Mdikana et al., 2009), likely through the process of acculturation (Redfield et al., 1936).

Another concept which has been widely utilised in the South African context postapartheid is that of 'born frees', which according to Norgaard (2015) refers to a generation of
young South Africans who have no living memory of apartheid. This generation is presumed
to have the opportunity to craft their identities freely when compared to previous generations
who have the lived experience of apartheid. However, the author notes that this
monochromatic reference is idealistic. Instead, this generation has not been able to easily
renegotiate and construct their identities in the South African context due to the presumptions
of this label. Reflectively, adolescents in the South African context post-apartheid are still
unable to construct identities free of the governmental bureaucracy and legal formality, as
even the positive concept of the 'rainbow nation' may contribute to subtly encourage the
marginalisation of cultural uniqueness in the name of national harmony (Norris et al., 2008).

Ultimately, the transition from the previous regime has brought about many unpredictable changes for the identity development of the *Born Frees* who have the challenge to negotiate this fluidity in order to negotiate and construct a coherent sense of being (Norgaard, 2015). As Torres et al. (2009) posit, the past governing systems have likely contributed to the contemporary South African narratives of identity. Evidently, identity development in diverse contexts such as that of South Africa is more varied and complicated when compared to populations who have singular cultural or singular racial identities (Sanchez et al., 2014). In

line with this, South Africa is a case to explore identity development from a multidimensional model of acculturation, rather than a bi-dimensional model, as the former explores how individuals form their identities with plural cultural contexts (Adams & van de Vijver, 2017).

In a nutshell, identity development is a continuous process (Mdikana et al., 2009) which does not occur in isolation, thus it warrants the exploration of social, cultural and historical processes and the role these factors play in the formation of individual identities (Brown & Tappan, 2008). As affirmed by Erikson (1968) and Stevens and Lockhat (1997), identity achievement is reliant on the assimilation of not only intrapsychic aspects but also the sociohistorical aspects of the developing adolescent. Despite the dynamics of the current and previous political climate, adolescents must still develop an identity which is genuine and authentic (Abdi, 1999). However, the fact that identity is dynamic, flexible and proficient enough to adapt to new social-cultural and historical factors as they emerge is helpful in this regard (Hall, 1990).

### 2.6 Gender and Identity Development

The term gender has been referenced since the 14<sup>th</sup> century and is often used interchangeably with the term sex (Alam, 2013). However, the two terms refer to two distinct but also interrelated facets of the state of being male or female. Sex is often used to describe the biological aspects, while gender focuses on the social and or cultural aspects such as gender roles (Alam, 2013; Carter, 2014). In the context of this research study, it makes reference to gender by adopting the definition by Xue (2008), wherein gender is seen as a social construct which is complex, dynamic and fluid, and represents the biological assignment of social roles which are reflective of cultural and social conceptualisations (Conway et al., 1987).

It may be due to the dynamism of this construct that Cramer (2000) suggests that there is a need for consideration of gender in the studies of identity development. Additionally, this suggestion may be encouraged by the longstanding controversies concerning whether male and female adolescents embark on similar pathways to identity formation, which have likely contributed to the varied and contrasting findings regarding the role of gender in identity development (Mazalin & Moore, 2004; Sandhu & Tung, 2006). In this section of the research, an exploration of gender and its potential influence in the process of identity development is carried out.

According to Sudarshan Ratna (2005), gender parameters are reflective of the prevailing social norms, the dominant perspective of the time, economic dynamics as well as the political agenda of a given context. This perspective is evident when comparing the views of Erikson and Marcia regarding gender and identity development, which signal perceptual shift over time. For instance, in the 1960s Erikson's approach to gender in identity development was largely prescriptive, having stated that women ought to remain open for the idiosyncrasies of a man to be incorporated as well as the raising of children in their identity development before full resolution can take place, while describing the identity development of males as that characterised by individual competence and acquisition of knowledge (Erikson, 1968). Years later, Marcia's (1980) view on the role of gender in identity development espoused a different approach, having asserted that gender influences identity formation in accordance to given societal expectations and the different genital configurations, and thus cautioned that identity researchers should be aware of the espoused societal gender expectations in a context of enquiry.

Evidently, views on the role of gender in identity development have evolved over time and reflect a progressive perspective, unlike the views of Erikson which are biased, non-universal and also limited (Gilligan, 1979; Marcia, 1980), as they are only noted in communities which encourage these typical pathways in identity development (Sandhu & Tung, 2006). As such, in contemporary Western societies most men and women now prioritise occupational careers, while child-rearing has become less in terms of gender-typified behaviour of females (Devi, 2018; Klimstra et al., 2010). In line with this, recent literature seems to indicate that female adolescents are not passive recipients concerning the construction of their identities (Theodosiou-Tryfonidou, 2016). Therefore, current literature should distinctly investigate identity formation among contemporary women (Côté & Levine, 1987).

The gender-related societal shifts highlighted have stimulated a view that research on gender and identity development should focus on understanding the differences and or similarities of structure, process and timing of identity development and focus less on gender content, which can be extremely wide and varied (Cramer, 2000). Consequently, Meeus et al. (2012) and Schwartz et al. (2011) found minor gender differences in the overall process of identity formation with the exception of the timing of change, wherein females appeared to be ahead when compared to their male counterparts. Females tended to be represented more in the achievement and foreclosure status while males were predominantly represented within the moratorium and diffusion statuses. Verschueren et al. (2017) found differences in their study, having established an over presentation of women within the moratorium identity status, while establishing an over presentation of males within the diffusion and foreclosure identity statuses. Al Diyar and Salem (2015) established a pattern wherein the identity statuses of achievement and moratorium were in favour of male participants and no statistical significance of identity statuses of foreclosure and diffusion in either gender. On the other

hand, Mdikana et al. (2009) and Salami (2008) found no statistically significant differences between the genders in any of the identity statuses.

The quoted research studies do not provide a coherent picture regarding the role of gender in identity development. The differences in findings could be accounted for by other variables that are known to have an influence in identity statuses such as age, race, socioeconomic status and or a particular identity aspect being investigated (Erikson, 1964, 1965, 1968; Pellerone, et al., 2015; Tsang et al., 2012). Conversely, the gender differences may be reflective of the different approaches utilised by each gender in their process of identity development. For instance, the process of identity exploration may take several forms, namely: either primarily a cognitive-driven method (Berman et al., 2001; Berzonsky, 1990; Grotevant, 1987), or alternatively an emotionally-focused process (Schwartz, 2001; Waterman, 1993, 1995). As both of these approaches are useful in facilitating identity exploration, adolescents may engage in identity exploration and commitment tasks in accordance with their gender socialisation (Schwartz et al., 2005). For example, males' personal identity is typically gendered through the promotion of characteristics such as dominance, autonomy and aggression, while females are typically gendered to espouse characteristics of collectiveness, expressiveness and connectedness. Thus, personal identities can be cultivated according to gender orientation (Carter, 2014).

In summary, it appears that gender can be an influential factor in identity development in contexts where identity is socialised according to gendered behavioural expectations often already socialised in early developmental stages (Carter, 2014). Notwithstanding this, differences appear inconsistent in the various sources, as attested by Kroger (2003), who

makes mention of the limited evidence regarding gender differences in the areas of identity structure, salience and or the developmental processes.

# 2.7 Chapter Summary

This chapter has provided literature on identity development during adolescence, while closely examining the influence of gender in this regard while considering the South African context. Louw and Louw (2010) define adolescence as the period of transition between childhood and adulthood. This developmental phase brings about a host of challenges accompanied by many physical, cognitive and social emotional changes (McBride Murry et al., 2011). A key aspect of development which takes place during adolescence within the psychosocial aspect is development of identity, which Erikson (1964) describes as the subjective assessment of "sameness and continuity in the face of changing fate". Marcia (1966) proposed that the process of identity formation occurs through two qualitatively distinct orthogonal processes, namely exploration and commitment (Kłym & Cieciuch, 2015). Marcia went on to derive distinctive categorical psychological states which reflect levels of maturity of self-regulation and complexity of social functioning (Marcia, 1980) and termed these identity statuses. Exploring identity development in the South African context by focusing on the distal factors of culture and history revealed a process that was relatively challenging, as the adolescents in this context have to navigate these dynamics. The role of gender in identity development was explored and was observed to be wide-ranging rather than conclusive (Sandhu & Tung, 2006).

# CHAPTER 3: CAREER MATURITY DURING ADOLESCENCE IN THE SOUTH AFRICAN CONTEXT

This is the second chapter of the literature review. In this chapter the focus is on exploring the concept of career maturity within the adolescent population in the South African context. The chapter commences with a discussion on concepts which are closely related to the concept of career maturity. The exploration of closely related concepts is necessary to provide the background and context for career maturity. Following the explanation of foundational concepts, career maturity is distinctly defined and the applicable foundational theorists are explicated. The chapter proceeds with a discussion on career maturity particularly within the developmental phase of adolescence. Additionally, the South African context and the psychosocial factor of gender in the development of career maturity are discussed. Finally, the chapter is completed with an exploration of the association between each ego identity status and career maturity. A brief summary concludes the chapter.

# 3.1 Conceptual Foundations

As highlighted in the introduction, this chapter commences with the definitions and descriptions of the concepts of *career* and *career development*. These constructs are interrelated with career maturity, as career maturity exists within the broader scope of career development (Buys, 2014; Themba, 2010), thus cannot be understood in isolation.

#### 3.1.1 Career

Adekeye et al. (2015) and Coertse and Schepers (2004) are of the view that exploring the meaning of career maturity should be headed by understanding of what a career is. There are numerous ways in which the term career is beheld and subsequently defined (Fourie, 2012;

Devi, 2018; Kazuyuki & Kuo-lin, 2006). Moreover, this concept is often synonymously referenced with concepts including occupation, position and job (Super & Hall, 1978).

According to Super (1957, 1974), career refers to the sequence of occupations and other life roles which combine to demonstrate an individual's commitment to work in their total pattern of self-development. Sears (1982) defines career as the series of either paid or unpaid occupations or jobs which an individual holds throughout their life. Sullivan and Baruch (2009) define career as work-related and other pertinent experiences, inside and outside of organisations which form a unique pattern in an individual's lifespan. The pertinent experiences highlighted in these definitions include education, formal and or informal training, volunteer work, leisure activities and the various roles such as being a parent or child through the course of the lifespan (Gyansah & Guantai, 2018). Contrariwise, in the era of the fourth industrial revolution, some aspects of career will transform from being perceived as a series of jobs held sequentially over a lifespan to rather a series of tasks and projects completed over different organisations (Hirschi, 2018). The various definitions consulted are indicative of an evolutionary progression of what informs career (Mulhall, 2014). However, all these definitions hold the common element that career implies a systematic relationship to time; as such, Crites (1969) and Super (1977) recognise career spanning over a person's total lifetime.

# 3.1.2 Career Development

Evidently, career is an ever-changing process accrued to time and requires individuals to be active and to constantly construct links between themselves and their working environment (Super, 1977). Therefore, career development relates to the ongoing process of obtaining the necessary activities and experiences which will then support the

accomplishment of the life and work goals which encapsulate career (McDonald & Hite, 2015). As asserted by Gyansah and Guantai (2018), career development is about the individual managing their growth and advancement in their career.

As with the term career, recent and rapid structural changes in the work life of humans has led to epistemological changes in defining and describing the concept of career development (Chen, 1998). Career development is explained as the lifelong pattern of growth in an individual's career path (Sears, 1982; Super, 1957). According to the Canadian Standards and Guidelines for Career Development Practitioners (2012), "Career development is the lifelong process of managing learning, work, leisure, and transitions in order to move toward a personally determined and evolving preferred future" (p.2). Baer et al. (2008) echo similar sentiments, noting that career development is a process of growth spanning over the course of the lifetime already beginning in childhood and extending all the way into retirement and enhanced by education, training and other maturational processes. However, in contexts which embrace collectiveness, as evidenced within certain cultural groups in South Africa, career development does not reflect individual goals, but is rather seen as a process for the collective good (Watson et al., 2011).

Furthermore, the career development process is unique for every person (Kosine & Lewis, 2008; Lau et al., 2018). It is during an individual's development that a collection of experiences is accumulated, which then promotes the foundational attitudes, beliefs and competencies necessary for the process of career development (Savickas, 2009). Patently, career development is best facilitated by personal responsibility, however, organisations also have a role to play, and one way they can contribute is through providing channels for employees to develop accordingly (Gyansah & Guantai, 2018). As already alluded to,

developing a career is not a destination but rather a process influenced by a complex interaction of the individual and their environment (Bakari, 2014; Devi, 2018; Kosine & Lewis, 2008).

# 3.2 Career Maturity

Researchers are interested in identifying and exploring constructs which enlighten how individuals cope with career developmental-related tasks, such as choosing a career (Atli, 2017; Hirschi, 2009; Kenny & Bledsoe, 2005). One such identified construct is career maturity (Hirschi, 2011), which is fundamental to the developmental approach of studying career development (Kumari, 2018; Seane, 2017). Noteworthy, it is not uncommon in literature to encounter the use of the term 'career maturity' and 'career adaptability' used interchangeably when discussing the relevant construct/s underlying processes in relation to career development (Janeiro, 2010). The proposition to replace career maturity with career adaptability was rather recent (Savickas, 1997). In this research, reference to career maturity is still made and in this section this concept is extensively investigated.

According to Crites (1973), the early roots of this concept are traced to Donald E. Super. In its early inception, career maturity was referred to as vocational maturity (Super, 1957). The change in the operational definition of career maturity is reflective of a shift in the perceptions of career and vocation. These concepts are closely related but not necessarily equivalent (Hughes, 2015; Watson, 2008). Historically, vocation is regarded as the idea that the full range of occupations occupied are as a result of *calling*, which dates back to the 16<sup>th</sup> century (Dik & Duffy, 2009), and fulfilling the *calling* is about taking action towards fulfilling pro-social intensions (Elangovan et al., 2010). Thus, vocation distinctly rests on the condition of providing psychological or spiritual meaning for the individual over and above its economic rewards when selecting a career (Healy, 1982). Additionally, the shift from

vocation maturity towards career maturity is primarily attributable to the indistinctiveness of the term vocation in the way it presents the concept of work, as well as its historic entrenchment outside the contemporary labour market frame and instead having more religious affiliations (Dawson, 2005). In the same way, the movement towards protean careers as influenced by the economic and societal shifts has produced values which are negative to purpose and meaning in work, thus further encouraging the movement away from vocation (Dik & Duffy, 2009).

Super (1955) defines career maturity as "the place reached on the continuum of vocational/career development from exploration to decline" (p. 153) in the Career Development Theory. In Super (1977), there is refinement to this definition and career maturity is defined as the skill to plan career choices, advance awareness about the various career options and ultimately assume responsibility to make a career choice. Since then, many authors have given effort to defining and conceptualising this multifaceted concept, including Barendse (2015), Buys (2014), Cheng et al. (2016), Miles (2008) and Savickas (1984, 1999). Commonly, these scholars' definitions of this concept essentially capture career maturity as the readiness of an individual to make knowledgeable and age-appropriate career decisions in conjunction with coping with the appropriate career development tasks. Other scholars reference career maturity as the process by which individuals make career choices and their ability to successfully deal with the relevant tasks and challenges in their specific developmental stage (Swanson & D'Achiardi, 2005; Themba, 2010). Alternatively, Singh and Shukla (2015) describe career maturity as an individual's level of career development.

The development of career maturity is typically an individually-oriented process influenced by a wide variety of interacting psychological and social factors (Bozgeyikili et

al., 2009; Mubiana, 2014; Prideaux & Creed, 2001). These factors include locus of control, age, gender, race, developmental stage, interest, self-concept, personality, self-esteem, peers and mentors, availability of social networks, family influences, cultural background and socio-economic status (Alam, 2013; Naidoo, 1998; Obiunu, & Ebunu, 2010). The wide variety of potential influential factors may account for individual differences noted when exploring career maturity (Super & Bohn, 1970).

Evidently, career maturity is central to career development, as it not only influences career decision-making but is also linked to career satisfaction and retention, especially in the present-day world of work (Schreuder & Coetzee, 2011; Super, 1957; Swanson & D'Achiardi, 2005). Over the years, these sentiments have also been echoed by various scholars who recognise career maturity as an important psychosocial factor in career development particularly in the 21<sup>st</sup> century, where careers have become less predictable (Adekeye et al., 2015; Buys, 2014; Cheng et al., 2016; Coetzee & Schreuder, 2014; Super, 1950; Themba, 2010).

### 3.3 Theories of Career Maturity

Career maturity has been studied for half a century; however, there is still much debate as to the best-suited theory to explain career maturity (González, 2008). Accordingly, in this section of the literature the focus is on exploring certain theories which extrapolate career maturity, as theories offer the benefit of providing understanding into how individuals make their career decisions from a well-informed academic perspective (Mubiana, 2014).

### 3.3.1 Super's Career Development Theory

According to Gothard (2001), Leung (2008) and Osipow (1973), Super's theory is one of the most detailed and explicit theories providing a meaningful base explanation for the career development process. Super's theory spans over several decades (1953, 1957, 1969, 1972, 1981, 1984a, 1990; Super et al., 1996), subtly evolving over the years (Salomone, 1996).

Foundational to Super's theory are several theoretical propositions on career development (Salomone, 1996). Noteworthy, Donald Super did not contribute to career development literature through a cohesive theory, but rather by initially proposing 10 propositions which later expanded to 14 propositions which enhance and extend career theory (Momberg, 2006). Donald Super's theoretical contributions are also dynamic and reflect interdisciplinary influences borrowing from differential psychology, developmental psychology as well as self-concept theories (Hartung, 2013; Whiteley & Resnikoff, 1972). Due to the extensive nature of these propositions and their accompanying wide elaborations, only the most applicable aspects of Super's contributions to career theory are referenced in this research study.

The concept of career is the foundational basis of Super's theory (Salomone, 1996). The definition of this concept has evolved over time, gradually breaking away from the main focus of defining career primarily by focusing only on the economic aspects. Super (1957, 1980) defines career as the sequence of occupations and other life roles which combine to demonstrate an individual's commitment to work in their total pattern of self-development. This suggests that career development does not occur in isolation but is rather bounded in lifespan and life space, encompassing social learning experiences, personality, needs, wants, values, aptitudes and life roles (Kosine & Lewis, 2008; Super, 1980).

The extent of all the relevant sociological aspects of career are well accounted for in Super's (1980, 1990) Life-Career Rainbow Model and Archway of Career Determinants Model. These models well depict the personal and situational elements which interact to inform the careers of individuals (Salomone, 1996). Furthermore, Super (1988) states that career is the process of implementing one's self-concept. In so doing, individuals base their career decisions on their self-concept and then enter into an occupation which will permit the self-expression of the internalised self-concept (Super, 1990).

As mentioned, Super's theory is also underpinned by developmental psychology, hence career is also conceptualised as developing in a series of developmental stages (Super, 1955). This approach to contextualising career/s is helpful to appraise various vocational issues and problems and further assists with planning in educational settings (Super, 1942, as cited in Salonome, 1996). The proposed developmental life stages are demarcated by age ranges (Stead & Watson, 1998), however, Super (1972) mentions that not all individuals progress through these stages according to these age ranges and or utilise a similar approach. The proposed stages are assumed to progress in a form of a maxi-cycle through individuals' life journeys (Super, 1980, 1990). However, a mini cycle of these stages is possible within each developmental phase, particularly in cases of transition or unexpected career changes (Savickas, 2002). The life stages are termed *growth*, which is expected within age ranges of 4–13, *exploration* for age ranges of 14–24, *establishment* within ages of 25–44, *maintenance*, which is expected within age ranges of 45–65, and the last phase termed *decline* within the age ranges of 65 and above (Kosine & Lewis, 2008; Super, 1957).

Moreover, there are vocational tasks prominent within the developmental periods which are also demarcated by chronological ages, although not necessarily exclusive to these age ranges (Super, 1990). These vocational tasks are methods utilised to correct and facilitate career development (Osipow, 1973). The first vocational task is termed *crystallisation*, which takes place within the chronological ages of 14–18 years, and is characterised by planning and developing a tentative occupational goal. The second occupational task is *specification*, which is expected within the chronological ages of 18–21 years and is characterised by affirming the identified vocational goal. The third occupational task is *implementation*, which is expected within the chronological ages of 21–24 years and characterised by obtaining the necessary training and employment. The fourth occupational task is called *stabilisation*, which is expected within the chronological ages of 24–35 years and is associated with working and confirming the career choice. The fifth occupational task is known as *consolidation* and is typically expected within the chronological ages of 25 years and above and pertains to advancement in career.

The proposed vocational and or career tasks reflect the responsibility an individual is faced with during a developmental phase in the process of career development (Super, 1963), of which Osipow (1973) contends that general maturation is necessary for proper execution of vocational developmental tasks. Alternatively, Super (1957) proposes the term career maturity as one of the 14 theoretical prepositions which denote how individuals cope and master tasks of increasing complexity during the different stages of career development in the course of the lifespan. This term was initially termed vocational maturity but later changed to career maturity, which came with other advancements in its definition. By the early 90s, the definition of career maturity evolved to encompass affective and cognitive dimensions which

are developed from the physical, psychological and social traits, all of which combine to foster coping with stages and tasks associated with career development (Super, 1990).

Savickas (2001) applauds Super's contributions in the field of career psychology as it brought focus to the elements of personality, human development and longitudinal perspective to career development, which in turn brought innovations to the field of career counselling. However, the work of Super was not without criticism. Stead (1996) criticised the element of life stages in this theory, citing that they were inefficient to indicate the career decision-making processes amongst disadvantaged Black young people in South Africa.

Super is also criticised for suggesting that contextual factors only sporadically impact the career development process, as in contexts such as South Africa circumstantial factors are far more unpredictable in this process in contrast to the initial contexts in which Super conducted his research (Stead & Watson, 1998). Nevertheless, Super (1984) admitted that his theory had not been well integrated and instead had been more segmented.

### 3.3.2 Crites' Model of Career Maturity

Crites' (1971, 1973, 1976, 1978, 1981) contribution to career development literature echoes similar sentiments to the work of Super (1950), as both perceive career as a lifelong process of decision-making and greatly influenced by career maturity. Nevertheless, Crites' (1971, 1973) theory differs, wherein the concept of career maturity is expounded into attitudinal and cognitive competencies (Shukla, 2001).

The proposed dimensions encapsulating career maturity stem from a model of four primary group factors each with its own sub-indices (Crites, 1973). The proposed four primary group factors are: consistency of career choice, wisdom of career choice, career

choice competencies, and career choice attitude factors. These factors are further classified into two major categories, namely: career content and career choice process (Ziebell, 2010). The factors of *consistency* and *realism/wisdom* are categorised under career content, while the factors of *competencies* and *attitudes* are categorised under career choice process (Crites, 1971, 1973). Greater emphasis is placed on the factors related to the career choice process as the core fundamentals of career maturity (Patton et al., 2004), to the extent that the published Career Maturity Inventory (CMI) in Crites (1978) primarily assesses the cognitive and affective dimensions of career maturity (Dybwad, 2008).

Commencing the discussion with factors classified in the category of career content, the factor of *consistency of career choice* pertains to the degree of stability and consistency in an individual's career preferences (Tekke, 2012). Other variables considered with this factor include consistency in terms of field, time, level, family and independence (Crites, 1973). The second career content factor is *wisdom of career choice*, which is about realism regarding interests, skills, abilities and personality which must be a fit with the occupational preferences (Crites, 1973; Tekke, 2012).

The remaining career maturity group factors are classified in the category of career choice process. The *career choice competencies* factor in career maturity reflects the cognitive abilities related to decision-making skills in the process of career development such as problem solving, planning, goal selection, self-appraisal, comprehension and the acquisition of occupational information (Crites, 1971, 1973; Hasan, 2006). Comprehension pertains to having an awareness of the applicable career-related processes. Occupational information relates to having knowledge of career development principles and the application thereof, knowledge of occupational structures, information on the field of interest and knowledge of

the conditions important to the maintenance of the job (Crites, 1971; Herr et al., 2004; Swanson & D'Achiardi, 2005). Savickas (2002) further asserts that knowledge of personal abilities and skills is essential, making self-exploration equally important (Mdikana et al., 2009). Ultimately, the correct cognitive abilities permit the individual to be able to adequately handle the several career challenges which may arise, not only in the course of their lifetime in general (Mubiana, 2014), but also when faced with educational- and vocational-related problems (Savickas et al., 2002).

The other career process factor in career maturity is termed *career choice attitudes*, also referred to as the affective dimension (Tekke, 2012). The affective dimension relates to attitudes and inner feelings (Crites, 1971) towards career planning and career exploration (Salami, 2010). An individual may possess a mature or an immature attitude towards either career planning and or career exploration. A mature attitude is demonstrated when individuals have an attitude for looking ahead, are actively engaging in career planning activities, and are willing to seek and obtain resources beneficial to career planning even if a non-serious approach is employed, whereas individuals with immature attitudes tend not to engage in similar futuristic activities (Savickas et al., 2002). Thus, the affective dimension reflects attitudes of compromise, decisiveness, independence, involvement and orientation in career development (Crites, 1978). The mentioned elements mediate and lead the process of goal selection and problem solving, typically mediating the use of choice competencies (Crites, 1973, 1978; Hughes, 2005).

On the whole, the Crites model of career maturity is helpful in practically conceptualising career maturity instead of this term remaining only theoretical and abstract. However, as with many theorists in this field who tend to omit the contribution of the social context in the

development of career maturity, Buys (2014) criticises Crites for failure to discuss culture as a predicting factor of career maturity.

### 3.3.3 Savickas' Career Construction Theory

There are criticisms labeled towards the previously referenced career theories, that these theories primarily take a Westernised approach in how they conceptualise career development (Watson, 2013). Additionally, other relevant core concepts from many of the career theories emanating from the 20<sup>th</sup> century are also criticised for not being applicable to the postmodern economy (Savickas et al., 2009). These shortfalls can be counterbalanced by the constructivist and narrative approaches, which are described as being more contextually and culturally sensitive (Sharf, 2013).

The Career Construction Theory proposed by Savickas is one of the emerged theories which is considered more contextually applicable (Watson, 2013). This is a career development theory which Rudolph et al. (2018) describe as exceptional, as the development of the Career Construction Theory is in response to the 21<sup>st</sup>-century work dynamics (Dix, 2020) and is imbedded in the constructivist and narrative approaches of career development (Savickas, 2012).

This theory looks at how individuals utilise their vocational personality to adapt to the many lifetime job changes while retaining a coherent sense of sameness and remaining recognisable to those in their environment (Savickas, 2009, 2013). Thus, this represents a career paradigm shift which promotes the epistemology of life-designing which deviates from personality and traits to rather focusing on the contextual opportunities, the involved dynamic processes, personal narratives and patterns as well as taking into consideration multiple perspectives (Savickas et al., 2009).

Essentially, Career Construction Theory seeks to extrapolate on the interpretive and interpersonal processes which individuals utilise to construct work self-concepts, enact direction on the vocational behaviour and effect meaning of their career paths, which reflects its fundamental influences emanating from the developmental, differential and dynamic angles on vocational behaviour (Savickas, 1997, 2005, 2013).

This modern model of comprehending vocational behaviour is based on the following core concepts, namely: *identity, adaptability, intentionality* and *narratability* (Savickas, 2005).

Adaptability has become necessary due to the unpredictable nature of the modern-day work which requires increased effort, extensive self-knowledge and a great deal of confidence.

Thus, workers must invest effort and adapt their identities capital and their stories in order to manage the ongoing occupational transitions and accompanying work traumas. In the face of change, workers ought to let go of past assignments but not necessarily let go of who they are, which otherwise has the potential to overwhelm them. One way they can hold on to who they are is by holding on to the self through a form of a life story, one which must provide a sense of coherence and continuity. For this reason, the constructed stories are crucial as they become a building method to the self, as well as providing means by which an individual builds a subjective career (Savickas, 2012). Important to note is that stories do not predict the future, but instead serve as a guide for an individual's career adaptation as they facilitate the evaluation of resources, limitations, traits and abilities to work through the work traumas and transitions (Savickas, 2005).

Adaptability is a psychological construct which refers to "readiness and resources to cope with current and future predicted tasks of vocational development and to the balance that an

individual is able to achieve between roles" (Savickas, 2002, 2005). This construct is proposed as a replacement to career maturity, as Savickas (1997, 2012) asserts that career maturity is ineptly fragmented in structure and lacks the all-encompassing power to encapsulate career development in all developmental periods, as career maturity is not favourable towards children and adults and is better suited for adolescents. Adaptation implies that individuals practice control over their careers by means of adaptively making use of psychosocial resources (Rudolph et al., 2018). Hence, successful career development reflects continuous adaptation through efficacious integration of personal needs while similarly meeting societal expectations (Savickas, 2002, 2005; Savickas et al., 2009). The conceptualisation of career adaptability makes use of the foundational dimensions of career maturity, namely: planning, exploring and deciding (Seane, 2017).

Furthermore, career adaptability is conceptualised as being composed of the following four dimensions, namely: concern, control, curiosity and confidence (Savickas, 2002). These dimensions are said to reflect a set of specific attitudes, beliefs and competencies. The ABCs of career adaptability outline the problem-solving strategies and coping behaviours which are utilised by individuals in creating their self-concepts in work roles. The dimension of *concern* references an individual possessing concern for their future career (Savickas, 2009). The dimension of *control* is about assumption of control through preparation for the career future. The third dimension, *curiosity* pertains to the demonstration of curiosity through the exploration of possible selves and possible future scenarios (Savickas, 2009). The fourth dimension of *confidence* is about empowering confidence which enables the pursuit of aspirations and or ambitions (Savickas, 2009).

To sum up, Career Construction Theory is a career theory which is better suited for conceptualising career development in the dynamic ever-changing world of work in the 21<sup>st</sup> century. Continuous adaptation is thus crucial, with Maree (2015) arguing that the ability to adapt is a critical survival skill within the work environment. Pillay (2020) explains adaptability as the "future-proofing" capacity which will assist workers to cope with ongoing changes in the economy, which in turn has an impact on their career.

# 3.4 Career Maturity in Adolescence

Career maturity originally emanates from the career development theory proposed by Super (1957), which has received considerable revival over the years and has become a valuable tool in understanding adolescent career development (Creed et al., 2002). Career development during adolescence is critical (Brown, 1997), more so in contexts such as South Africa where careers are dependent on the school subjects already selected during high school years, which is typically within the adolescence developmental period (Gehlawat, 2019). Other propelling reasons which evoke career maturity processes in adolescents include the decision related to whether to continue with formal education and training or obtain employment post high school (Supriatna, 2020). Based on this brief background, it seems to suggest that career development in adolescence is multifarious, dynamic and an overall critical period as career decisions are to be considered and implemented (Creed et al., 2002; D'Achiardi, 2005; Pellerone et al., 2015), which requires career maturity.

González (2008) believes that career maturity undergoes a great deal of development during adolescence, evidently fostered by the necessary academic decisions to be engaged. In support of this, Super as cited in Porferli and Skorikov (2010) considers the process of exploration in adolescence as happening along the developmental continuum of career

maturity. The exploration activities that adolescents typically engage in include self-discovery activities relating to their interests, abilities and broadening the development of their self-concepts (Kosine & Lewis, 2008). Ultimately, information regarding the 'self' during the exploration will be applied by adolescents in their career development process through matching their interests and abilities to occupations as well as applying their self-concept to work and life roles (Super, 1957). Accordingly, Super (1955) proposed five dimensions of career maturity which purportedly reflect the expected behavioural repertoires that underlie career maturity applicable to adolescents, as adapted from the Career Pattern Study, a 20-year longitudinal investigation.

The first dimension of discussion is *orientation to career/vocational* choice, which relates to the need to make a career choice (Mdikana et al., 2009; Super, 1955). This is the first step to career development (Dhillon & Kaur, 2005) and therefore awareness of this facet of career maturity is necessary, as career choice making is not a single event but rather a series of events, influenced by psychological, physical and social factors interacting in an individual's life which require negotiation and negation (González, 2008).

The second dimension is *information acquiring and planning* and designates the acquirement of specific information about the preferred occupation. Included in the information package is knowledge on the requirements of the occupation, the performance duties, its work conditions and opportunities. Lastly, a plan must be mapped about the needs which have to be accomplished during high school, post high school and during the entrance into the profession (Super, 1955). Against the stressors of other psychosocial tasks in adolescence, needing to obtain and analyse other career-related information may bring on

additional stress (Devi, 2018). Nevertheless, it may reduce stress associated with the pressure to identify with an occupation (Chávez, 2016).

The third dimension is *consistency of career/vocational preferences*, which highlights the importance for adolescents to develop consistency with their preferences (Super, 1955; Holland, 1985). It concerns the narrowing of goals by the dismissal of less attractive career preferences while building on the preferences which have remained post the exploration developmental task (Super, 1957), basing such decisions on the obtained identity, personality, interests, skills and values (Birol & Kiralp, 2010; Pellerone et al., 2015). However, Singh and Shukla (2015) and Dhillon and Kaur (2005) caution that the vast amount of career choices available in the 21<sup>st</sup> century has made it difficult to achieve consistency in career preferences.

The fourth dimension is the *crystallisation of traits*, which highlights the adolescent's solidification of their interests. There is also increased acceptance concerning the responsibility of having to make a career choice in conjunction with the development of realistic attitudes regarding the world of work (Super, 1955). Essentially, in order for an adolescent to make a correct and accurate decision during the career choosing phase, they must be aware of their skills, interests and values (Atli, 2017). One way adolescents can crystallise their relevant traits is by listing their strengths and weaknesses against the preferred career (Devi, 2018).

The fifth and final dimension referenced is *wisdom of career/vocational preference* and is viewed as the most complex and challenging to manage, yet also the most satisfying (Super, 1957). The difficulty comes from attempting to create congruence between an adolescent's activities, abilities, interests and preferences; however, it is possible due to the increase in the

knowledge about the preferred occupation (Super, 1955). Wisdom can be gained by investing noticeable effort into activities which will foster increased knowledge such as attending career talks, and exploring desired careers by speaking to the people in those desired fields (Devi, 2018).

Ultimately, the proposal of these dimensions (Super, 1955) is useful for mapping out the career maturity of adolescents, especially during the high school years (Crites, 1973; Super, 1957). Devi (2018) and Savickas et al. (2009) also highlight similar tasks and conclude that they lead to the accomplishment of career adaptability, which is an elevated version of career maturity.

# 3.5 Career Maturity and Gender

As previously deliberated, gender is a social construct which is thoroughly entrenched in many aspects of human lives including actions, beliefs and even desires (Eckert & McConnell-Ginet, 2013). It affects how adolescents manage all of the changes and challenges associated with adolescence, including career development (Perry & Pauletti, 2011). Callahan (2015), Gehlawat (2019) and Mtemeri (2017) assert that gender is an influential factor that needs to be considered when exploring career development. For instance, some studies such as Ismail et al. (2018), Lau et al. (2013), Patton and Creed (2002), Patton et al. (2004) and Sirohi (2013) established gender differences when exploring career maturity in adolescents.

Against these assertions, the mechanism/s which lead/s to gender differences in this regard are not well accounted for in literature. Patton and Lokan (2001) suggest that the differences are because overall development of career maturity differs between the genders. Cassie and Chen (2012) and King (1989) also established strong support for the notion that career

maturational processes between genders may respond differently. The differential pathways are likely promoted through gender role stereotyping and other applicable cultural socialisations (Prideaux & Creed, 2001). In consequence, career development processes including those that inform career maturity such as individuals' career orientation, perceptions of their competency and aptitude towards career-related tasks reflect these gendered socialisations (Alam, 2013; Cassie & Chen, 2012).

Various researchers have established gender differences in some dimensions of career maturity proposed by the primary theorists referenced in this research. For instance, Correll (2001) found that individuals select career choices primarily based on their gender distinguished perceptions, a finding which provides a plausible reason as to why men and women tend to differ in their career preferences overall (Callahan, 2015). Gender differences have also been noted in the dimension of exploration (Gewinner, 2017); for example, Farmer (1995) found that female adolescents typically tended to narrowly explore career options when compared to their male counterparts who explore wide and far.

Super (1963) posits that information seeking is an important dimension of career maturity which informs career goals, while Julien (1999) found that females presented with lower levels of information seeking when compared to their male counterparts, and this is attributed to females' perception of increased internal and external barriers towards obtaining the necessary information. Creed et al. (2005), exploring the affective dimension of decidedness as mentioned by Crites (1974), found that females tended to be continuously undecided when compared to their male counterparts. Career concern is one of the core pillars of career adaptability (Savickas, 2005), and when Coetzee and Harry (2015) explored gender differences in this regard they found evidence that females had higher level of career concern

when measured against male participants. Career planning, a cognitive dimension of career maturity according to Crites (1973) in Hargrove et al. (2005), was found to be favourable towards female participants, as they displayed more active behaviours such as enquiring with adult figures in their lives regarding future career, and obtaining part-time jobs as part of planning for their careers. Markedly, most of the quoted gender differences suggest a favourable outcome towards females, however, Patton et al. (2004) established an opposite pattern in this regard, having established that male participants have better outcomes in the career maturity dimensions of career goal selection, career planning and career exploration when compared to female participants. Birol and Kiralp (2010) account for the inconsistencies by stating that the variable of gender tends to interact with other variables such as socio-economic status, which may not be consistently accounted for in all studies.

Langley (1988) emphasises the importance of considering the greater macro context when exploring career maturity, especially when considering that gender role socialisations are not similar across contexts. Mdikana et al. (2009) state that gender role differences are prevalent only in societies that encourage differences between male and female. For instance, some societies tend to rear their female adolescents towards conformity and discourage exploration (Mdikana et al., 2009), such as in Nigeria, wherein Salami (2010) found that within this context it is still common practice not to encourage female adolescents to invest considerable effort into making an occupational choice and to rather assume female gender-role stereotypes, thereby rendering females less career mature when compared to their male counterparts. A different picture is prevalent in contemporary Western societies, where most men and women now prioritise occupational careers, while child-rearing has become less of a gender-typified behaviour of females (Devi, 2018; Klimstra et al., 2010). In line with this, Andreea-Elena (2014) did not obtain any gender difference when exploring career orientation

and attributed these findings to the possibility that in modern societies, different gender socialisation in this regard is no longer prevalent and both males and females are equally orientated to career.

Alternatively, as the majority of the career development theories were built on predominantly male samples, there is a possibility that female participants are inherently disadvantaged, as their career development processes may not be well understood (Cassie & Chen, 2012). Lastly, the inconsistency can be attributed to the fact that the construct of career maturity has many variations and thus researchers can select any of the indexes to measure this construct, which presents a disadvantage because no measure alone well captures the complete meaning of career maturity, hence the variability across study outcomes (Correll, 2001).

Against this background, career maturity research shows conflicting results when considered against the factor of gender (Naidoo, 1998), thus implying that the influence of gender in career maturity cannot be exclusively and conclusively accounted for. In cases where is was found to be a significant contributory factor, it promoted differential pathways for the development of career maturity in male and female adolescents rather than enact total presence or total lack of career maturity (Patton et al., 2003).

## 3.6 Career Maturity and the South African Context

There has been significant focus in literature towards considerations of context (cultural, educational, historical and socio-economic factors) and the role it plays in the development and expression of career maturity (Watson, 2019), especially when considering that career maturity is a multidimensional construct which develops through a complex interactive

process of internal and external factors (Bakari, 2014; Devi, 2018; Kosine & Lewis, 2008; Naidoo, 1998). In view of this, Mdikana et al. (2009) interrogated career development processes in the South African context wherein there is a host of potential contextual factors. According to Vondracek et al. (1986), the contextual perspective of career psychology in South Africa is informed by the country's politics, dynamic economy, and racial dynamics and their historical role/s, of which Maree (2009) asserts that this must be reflected in any epistemological advancements of career development in the South African context.

South Africa's socio-political context provides various potential outcomes for the career maturity of individuals. Considering the longstanding effects of the history of colonialism and apartheid as notorious systems which promoted racial and economic inequality, this has meant that the individuals of lower economic status are possibly deprived of opportunities and experiences which promote career maturity including good education, access to career counselling and other opportunities of relevant exploration (Pieterse, 2005; Pillay, 2020). Exploration is key in expounding career maturity (Brown, 1997), thus an environment has to make provision for the relevant exploratory experiences. However, even though at the dawn of democracy policies on inclusivity in education and career counselling were initiated (Naidoo et al., 2006), factors such as limited funding due to economic instability continue to disadvantage and deny adequate opportunities for the career development of many South Africans (Maree, 2009).

Additionally, the role of culture is of importance to discuss in the South African context, primarily due to the limited applicable research and theories emanating from this context (Patton et al., 2004). The South African context is unique and possibly different to the Western and Eurocentric culture contexts which informed most of the primary theories

referenced in this research (Stead & Watson, 1998; Watson, 2019). With this in mind, the lack of an appropriately informed developmental contextual perspective may result in research outputs which are misconstrued (McMahon & Patton, 2002), thereby leading to prescriptive and reactive career development outcomes (Watson & Stead, 2002a).

Overall, the role of culture in career development processes such as career maturity is important (Wesarat et al., 2014), as an individual's cultural background and heritage, be it collectivistic or individualistic, influences an individual's career-related perceptions, attitudes, behaviours and career choice (Akosah-Twumasi et al., 2018; Correll, 2001, 2018; Gregor et al., 2002). Thus, many young people make career-related decisions dictated by collective stereotypes bound within their cultural framework (Gewinner, 2017). The cultural representation of South Africa as that of a multicultural context may prompt different outcomes for career maturity when compared to individuals who do not have multicultural influences. Super, as cited in Watson (2019), recognised that the issue of multiculturalism in the application of career maturity has not been sufficiently deliberated.

To sum up, career maturity should be explored with context in mind (Langley, 1988; Savickas, 1995). This is especially relevant to the South African context, as previously utilised traditional assessments are not necessarily applicable to post-apartheid South Africa (Maree et al., 2001). Thus, research needs to broaden its scope to consider and incorporate the collectivistic perspective as well (Maree, 2009). These reflections ultimately caution against the assessment and generalisation of career maturity across dissimilar cultural groups, and that the attempt to achieve cultural construct equivalence cannot simply be done by endeavours of linguistic equivalence (Watson et al., 2005; Watson, 2008, 2019).

### 3.7 The Association between Career Maturity and Ego Identity Status

In accordance with the primary aim of this research study, which seeks to explore a relationship between ego identity and career maturity, in this section of the chapter the relevant literature is reviewed. There is evidence in literature which suggests a relationship between the aforementioned concepts. Grotevant (1987) asserts that career exploration is to a great extent an aspect of ego identity development. Munley (1975) has also long postulated that career development occurs within the framework of psychosocial development as proposed by Erikson. Likewise, Skorikov and Vondracek (1998) conclude that vocational development plays a prime role in the development of identity in adolescence. Accordingly, Golpich et al. (2009) and Salami (2008) found that the presence of career maturity in adolescents reflected differently in each identity status, with a significant and positive relationship towards moratorium and identity achieved statuses, which have been established to correspond with the aspects of planning and commitment as encompassed in career decision-making (Blustein, 1989).

The achievement ego identity status is perceived to be the most advanced form of identity development (McLean & Pratt, 2006). Adolescents classified according to this status have resolved the identity crisis and have carefully considered their options before making commitments (Kubeka, 2010; Luyckx et al., 2005). Salami (2008) found that this ego identity status significantly predicted career maturity of adolescents. Mdikana et al. (2009) also positively observed that the behavioural career maturity dimensions mentioned by Super, such as actively investigating personal and career-related information, were more prevalent in adolescents classified within the achievement ego identity status.

Characteristically, the moratorium ego identity status classifies individuals with active exploration of the various alternatives; however, they have not yet arrived at a set of commitments (Luyckx et al., 2005). Despite the lack of commitments within this ego identity status, the active exploration is influential to career maturity, as these adolescents are engaging in the exploration of relevant personal and career information. Both these ego identity statuses share the characteristic of exploration which is important to career maturity; this is supported by Super's ideas as cited in Porferli and Skorikov (2010), whereby the process of exploration in adolescence occurs along the developmental continuum of career maturity.

For the diffusion and foreclosure ego identity statuses there are indications of a poor relationship to career maturity (Salami, 2008). Given the characteristics of these ego identity statuses, such a finding is plausible. For instance, adolescents classified according to the diffusion ego identity status have not made any clear and sound commitments; additionally, no exploration of options is taking place (Luyckx et al., 2005). Procrastination in making life choices such as those regarding career is common, and thereby the adolescents may have to rely on receiving external directives on the type of career they should embark on (Salami, 2008), hence diffusion ego identity status is considered to be the least mature of the ego statuses (Côté & Schwartz, 2002). Adolescents in the foreclosure identity status have achieved commitments; however, these are achieved with a lack of exploration (Côté & Schwartz, 2002; Luyckx et al., 2005). The resulting consequence in career development is rushed commitments to a career (Marcia, 1966). The commitments are reflective of low levels of self-effectiveness in choices and diversification of professional preferences and are more the result of the adopted parental views, attitudes and opinions to decision-making (Marcia, 1980; Mdikana et al., 2009).

Evidently, a progressively coherent sense of identity is strongly correlated with exploratory and commitment behaviours which are pertinent for career maturity (Blustein et al., 1989). This is attributed to better and realistic perspective of abilities, aptitudes, interests, values and goals, as evidenced in individuals classified under the moratorium and achievement ego identity statuses when compared to individuals within the foreclosure and diffusion ego identity statuses (Koo & Kim, 2016; Landine, 2013; Pellerone et al., 2015). As such, Mdikana et al. (2009) conclude that the role of identity in career-related processes is more significant when compared to gender.

# 3.8 Chapter Summary

This chapter primarily focused on reviewing literature on the concept of career maturity. It commenced with defining and discussing various interrelated terms including career and career development in order to contextualise career maturity. Career is defined by Super (1974) as the sequence of occupations and other life roles which combine to demonstrate an individual's commitment to work in their total pattern of self-development. Career development is the process of obtaining the necessary activities which will then support the accomplishment of the life and work goals which encapsulate career (McDonald & Hite, 2015). Furthermore, the foundational theories in this section were discussed. In the theory of Super (1957), career maturity is conceptualised as a method utilised to cope with developmental career-related tasks. Crites (1971, 1973) echoes similar sentiments, in that career maturity is necessary in career development. His expansion on this concept was through conceptualising this concept by highlighting the affective and cognitive factors of career maturity. Additionally, there was specific focus on exploring career maturity within the developmental phase of adolescence. Super (1955) produced dimensions of career maturity in

adolescence based on the Career Pattern Study, a 20-year longitudinal investigation reflecting expected behavioural repertoires which underlie career maturity. The influential factors of gender and the South African context were discussed, before concluding the chapter by exploring the association of ego identity statuses and career maturity, in which the achievement ego identity status seems to suggest the strongest association (Salami, 2008).

#### **CHAPTER 4: METHODOLOGY**

The aim of this chapter is to provide a description of the methodology utilised in conducting the research. The research rationale, aim and questions, as well as the research design and approach which were used are described. A synopsis on the research participants and sampling procedures, data collection methods, data analysis and ethical considerations is provided. The chapter concludes with a brief summary.

### 4.1 Research Aim and Questions

As previously indicated, important career decisions are already being made during adolescence (Salami, 2008; Supriatna, 2020) and career maturity has been identified to be an important factor which facilitates career development (Crites, 1965; Super, 1953). The development of career maturity is influenced by contextual, biological and psychological factors (Buys, 2014; Naidoo, 1998). *Identity* is one of the contributory psychosocial factors in the development of career maturity (Jordan, 2018; Salami, 2008). Similarly, the social construct of gender (Xue, 2008) is implicated in the outcomes of career maturity and identity (Carter, 2014; Ismail et al., 2018; Lau et al., 2013; Naidoo, 1998; Patton et al, 2004; Patton & Creed, 2002; Sirohi, 2013).

Against this background, the aim of this research study was to explore the relationship between identity status and career maturity amongst male and female adolescents. This research study contributes to the existing body of knowledge on this topic, particularly in the South African context.

The following research questions were investigated:

- 1. Are there significant differences in identity status and career maturity between male and female adolescents?
- 2. Can identity status explain a significant amount of variance in career maturity?

## 4.2 Research Design and Approach

In this research study, a non-experimental-type, quantitative research study and correlational and criterion group designs were employed. Quantitative research approaches incorporate systemic and objective ways of collecting and explaining numerical data on phenomena of interest (Apuke, 2017; Maree & Pietersen, 2010; Muijis, 2010). Quantitative research is regarded as valuable and findings can be generalised, and numerical data can be aggregated, compared and summarised (Babbie, 2012; Goertzen, 2017; Maree & Pietersen, 2010).

This research study was also of a non-experimental type. In this type of research there is no manipulation of variables and the researcher is interested in the natural occurrence of phenomena (Asenahabi, 2019; Belli, 2008; Khaldi, 2017). Non-experimental research is applicable to intentions of describing, differentiating or examining associations (Reio, 2016; Sousa et al., 2007). A disadvantage of a non-experimental research type is its inability to answer cause and effect related questions (Johnson, 2001). In this research study, the researcher did not manipulate any of the variables (identity status and career maturity) and only relied upon the participants' responses as elicited by the data collection instruments.

Correlational studies typically explore the existence of a relationship among variables, while considering whether the relationship is positive or negative, as well as the strength of

the relationship (Apuke, 2017; Fitzgerald et al., 2004; Singh, 2007). Therefore, in this research study, a correctional research design was employed to investigate the existence and the extent of a relationship between identity status and career maturity. A shortfall of this design is its inability to reveal causal evidence amongst the variables (Asamoah, 2014; Thompson et al., 2005).

This research study also employed a criterion group design, as it involved a systematic analysis of similarities and or differences between the selected groups (Larrabee, 2011). A criterion group is made up of people who exhibit a distinct characteristic which differentiates them from others, and which may be determined by outside observation or self-description (Tuckman, 1999). In this research study, the distinct characteristic considered is gender. A systematic analysis was conducted to establish whether differences between the male and female adolescents exist regarding the two variables, namely identity status and career maturity.

## 4.3 Research Participants and Sampling Procedures

The sample of participants for this research study was selected from the population of adolescents within the Mangaung area. Mangaung is situated in the Free State province, central South Africa, and has an estimated population of 800 000, of which the adolescent population is the third largest group of people (Statistics South Africa, 2020).

The adolescence stage of development was relevant to this study as it is considered a prime period for identity development through the process of exploration (Erikson, 1968).

This exploration is also seen as happening on a developmental continuum of career maturity (Super as cited in Porferli & Skorikov, 2010). There is no consistency in denoting the precise

age ranges across professional sources of information on age ranges of adolescence (Meschke et al., 2012). For instance, Peper and Dahl (2013) suggest that adolescence ranges from age 10 to 25 years, while the World Health Organization (2014) considers age ranges of adolescence to be from age 10 to age 19. In this research study, participants within the age range of 14 to 21 were allowed to participate in order to obtain a large sample. Large samples are favoured as they represent the population of interest far better than smaller samples, and tend to produce findings which are more accurate (Maree & Pietersen, 2010). From a theoretical point of view, identity development is considered to be a prime task for adolescents (Erikson, 1968), however, Verschueren et al. (2017) note that this developmental task of identity development may continue well into the twenties. Thus, individuals who are in their twenties still present a viable population for investigations of identity development.

A non-probability, convenience sampling approach was utilised to recruit the sample from the identified population. Non-probability sampling refers to an approach to selecting participants in which the probability of selecting a member from the population is not known (Neuman, 2012; Springer, 2010; Vehovar et al., 2016). One of the major benefits of this approach is its feasibility and therefore reduced economic constraints (Feild et al., 2006; Showkat & Parveen, 2017). The particular non-probability technique which was used in this research study is convenience sampling. The use of this technique is applicable when the participants of choice in the population meet the specified criteria and are easily accessible (Dörnyei, 2007; Etikan et al, 2016; Maree & Pietersen, 2007; Springer, 2010; Vehovar et al., 2016). This technique has the value of being inexpensive (Maree & Pietersen, 2007), however, it can be a disadvantage, as not all of the potential participants have an equal chance to be selected (Mackey & Gass, 2005).

In this research study, the following inclusion criteria served as a guide to selecting participants. The participants had to be in the adolescent developmental phase up to the maximum age of 21. They also had to be attending one of the identified schools in the Mangaung area. To recruit the desired sample, a high school within the region was approached. The research aims and goals were discussed with the overseeing authority (such as the school's principal). A date for data collection was set for the schools that were interested. All the adolescents between 14 and 21 who were available and willing to participate on the scheduled date were included in the study. The final sample consisted of 362 participants following the elimination of questionnaires which presented with incomplete information.

In table 1 below, the important biographics (age, gender and language) of the sample are presented. The age biographic is included due to the age inclusion criterion, especially because the age range of adolescence varies in the different sources. The gender biographic is necessary, as one of the primary aims of this research study is to make gender comparisons of the base variables. The language criterion is necessary in a diverse context such as South Africa, as cultural background informs both identity development and the attainment of career maturity.

**Table 1**Distribution with Regard to Age, Gender and Language Biographic (N=362)

Biographic	Range	Frequency (n)	Percentage (%)
Age (years)			
(14–21)			
	14	1	.3
	15	48	13.3
	16	170	47.0
	17	94	26.0
	18	30	8.3
	19	6	1.6
	20	4	1.1
	21	2	.5
	Unknown	7	1.9
Gender	Male	132	36.5
	Female	226	62.4
	Other	4	1.1
Home Language	Other	3	.9
	SeSotho	192	53.3
	isiXhosa	33	8.8
	SeTswana	134	37

In terms of age, the majority of the participants were aged 16, who made up almost half the sample at 47%, while the next highest age of participants was age 17 at 26%. With respect

to gender, females made up 62.4% of participants. In terms of home language, 53.3% were Sesotho, while 37% and 8.8% were Setswana and isiXhosa, respectively.

# 4.4 Procedures of Data Collection

In this research study, data was collected by means of self-report questionnaires.

According to Delport and Roestenburg (2011), questionnaires are the most used and applicable method of data collection in exploratory and descriptive quantitative studies in the social sciences. The advantages of using fixed-format, self-report questionnaires include the relatively minimal effort of administration, i.e. multiple variables can be measured in group format at the same point in time (Bhattacherjee, 2012; Bless et al., 2006; Demetriou et al., 2014; Stangor, 2011). Additionally, the chances of researcher characteristics influencing the data are reduced when using questionnaires (Stangor, 2011). A disadvantage to using questionnaires is the predetermined nature of the instrument, implying that the researcher is unable to establish the individual thought patterns of the participants when answering the questions, as well as the differences in their interpretation. Demetriou et al. (2014) also warn of response tendencies known as desirability and response biases, which are not uncommon in self-report questionnaires.

The questionnaire battery used in this study consisted of a biographic section, as well as two inventories to measure identity and career maturity, respectively.

## 4.4.1 Biographical Questionnaire

A biographic questionnaire (Appendix A) was used to obtain biographic information regarding the participants and included information on participants' gender, age and home language. With the first two items, participants marked the applicable options, and for indicating home language they were provided with writing space.

# 4.4.2 Measure of Ego Identity Status (OMEIS)

To measure ego identity status, the Objective Measure of Ego Identity Status (OMEIS) by Adams et al. (1979) (Appendix B) was used. This measure is based on the theory of ego identity status by Marcia (1966).

This self-report measure consists of 24 statements and measures the four identity statuses proposed by Marcia, namely: achievement (six items), moratorium (six items), foreclosure (six items) and diffusion (six items) (Adams, 1998). Participants respond on six-point Likert scaled items ranging from strongly disagree to strongly agree. The scores for each identity status can thus range between 6 and 36 for each identity status. Examples of questions measuring the different ego statuses include: a) Achievement: "A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe"; b) Moratorium: "I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such"; c) Foreclosure: "I might have thought about a lot of different things, but there has never really been a decision since my parents said what they wanted"; and d) Diffusion: "I haven't really considered politics. They just don't excite me much" (Adams et al., 1979).

Various studies with adolescents have been conducted using this instrument. In a study conducted by Adams and Jones (1983) on 10<sup>th</sup> and 12<sup>th</sup> graders, the Cronbach coefficients were found to be .75 (full scale) and .84, .76, .77 and .80 for the respective subscales. In the South African context, the Cronbach coefficient for the full scale was found

to be .71 in a population of adolescents (Grové, 2015). Other studies conducted in the South African context were found to have used the extended version of the OMEIS (Mashegoane, 2012), as there are several modifications and revised versions of this measure based on an Eriksonian framework (Adams, 1998).

In this research study, the Cronbach alpha coefficient for the full scale was found to have low reliability. Thus, an item analysis was conducted for the purposes of identifying items which are not suitable in this specific application of the instrument. Problematic items were removed. Ultimately, each subscale totalled four statements instead of six (as is the case with the original scale), resulting in a subscale range of 4 to 24. The reliability coefficients for the adjusted subscales are as follows: Diffusion Subscale  $\alpha$  = .449, Foreclosure Subscale  $\alpha$  = .459, Moratorium Subscale  $\alpha$  = .576 and Achievement Subscale  $\alpha$  = .544.

By conventional standards the subscale scores still reflect poor reliability (Maree & Pietersen, 2007). However, in this research study these scores are not discarded because the , removal of problematic items showed improvement despite the reduction of items into four instead of six for each subscale. Streiner (2003) indicates that the size of the alpha is dependent on the number of items on a scale. For instance, if the number of items increases, the scale's reliability tends to increase (Vaske et al., 2017). Therefore, in this research study the removal of problematic items overall reduced the number of items in each subscale but did not negatively impact internal reliability consistency.

# 4.4.3 Career Maturity Inventory (CMI)

To assess career maturity, the adapted Career Maturity Inventory (CMI) SF by Crites and Savickas (as cited in Savickas & Porfeli, 2011) (Appendix C) was used. This measure evolved from Super's (1953) career pattern theory. Over the years it has been revised (Crites, 1965, 1978; Crites & Savickas, 1995). In this research study, the CMI Screening Form (SF) was utilised. This form has been specifically modified to accommodate research studies (Savicka & Porfeli, 2011). The foundational theory with this version is the Career Construction Theory (Savickas, 2005). The CMI-SF (Appendix C) provides a single indicator of career choice readiness, with high scores suggesting decidedness and vocational identity commitment.

The CMI-SF consists of 10 statements which measure career maturity (Savickas & Porfeli, 2011). Participants respond on a two-point scale (agree or disagree, scored 1 or 0). Examples of questions measuring the element of decidedness are as follows: 1. "I can't understand how some people can be so certain about what they want to do"; 2. "I don't know what courses I should take in school". When a participant agrees with such a statement it signifies undecidedness.

The Cronbach coefficient of the scale was confirmed to be .83 for students attending grades 9–12 (Savickas & Porfeli, 2011). No South African studies could be located to use as a reference for Cronbach coefficient confirmations in the South African context. In this research study, the Cronbach coefficient for CMI-SF was .605.

In this study, data was collected by the researcher from the learners during the designated school period accompanied by one of the school's educators. The educator accompanied the researcher for the purposes of showing the researcher the relevant classes and to ensure that the learners were not using this designated period to misbehave. It was decided to distribute the questionnaires per class due to the large number of participants identified. At first, the aims and nature of the research were introduced, ethical considerations were discussed and informed consent was obtained (see Section 4.6 for more information on ethical considerations). Thereafter, the above-mentioned questionnaires were distributed, the precise instructions on how to complete the questionnaire were conveyed, and a brief period was permitted for questions related to the completion of the questionnaire. These procedures were strictly adhered to in each class of participants to ensure validity and reliability. To ensure a conducive environment for the completion of the questionnaires, the learners were requested to remain seated and quiet until all participants were finished, after which the researcher collected all the questionnaires. On average, the completion time ranged from approximately a minimum of 15 minutes to a maximum of 40 minutes.

### 4.5 Data Analysis

Statistics is the science of organising data and subsequently drawing conclusions based on the collected data (Price & Chamberlayne, 2008; Rahman, 2018). In this research study, various statistical methods and techniques were applied to analyse the data, using the Statistical Package for the Social Sciences (SPSS) (IBM Analytics, 2016). The various techniques were used to organise the collected data in an attempt to draw conclusions on the relationship between identity status and career maturity in male and female adolescents.

Firstly, the reliability of the measuring instruments (OMEIS and CMI) in this specific sample was determined by means of Cronbach alpha coefficients. The calculation of alpha is considered important when multiple-item measures of a concept are used (Tavakol & Dennick, 2011). Cronbach alpha coefficients are a measure of internal consistency of the items of a scale (Bonett & Wright, 2015; Bujang et al., 2018; Taber, 2018; Tavakol & Dennick, 2011).

In addition, descriptive statistics were employed to summarise the data in a meaningful way. The sample's biographic characteristics were summarised using frequency distributions, while means and standard deviation scores were computed for the continuous variables.

To investigate whether significant differences exist in identity status and career maturity between male and female adolescents, the inferential statistics including the multivariate analyses of variance (MANOVA) was utilised. According to Grice and Iwasaki (2007), the main goal of a MANOVA is to differentiate between two or more distinct groups in a combination of quantitative variables. This is a complex analysis, thus it can be challenging to interpret its results (Murrar & Brauer, 2018).

Furthermore, the standard multiple regression analysis was completed in this research study. A standard multiple regression analysis is employed when attempting to explore the relationship between one dependent variable and a number of independent variables (Maree & Pietersen, 2007; Uyanık & Güler, 2013). In this research study, it is used to explore how well each identity status (foreclosure, moratorium, achievement and diffusion) can explain the variance of career maturity.

#### 4.6 Ethical Considerations

The Health Professions Council of South Africa places emphasis on the importance of ethical practice in research involving humans due to the possible adverse impact, particularly in vulnerable groups (Health Professions Council of South Africa, 2008). Thus, any foreseeable risk towards participants, particularly vulnerable participants must be averted and potential risks minimised (Gordon, 2020). The following ethical considerations were taken into account in this research study: permission, informed consent and assent, anonymity, confidentiality and the prevention of psychological harm.

Ethics committees have a duty to ensure that educational researchers adhere to ethical standards (Brown et al., 2020), specifically in research involving human participants (Coleman & Bouësseau, 2008). Accordingly, prior to commencing with this research study, authorisation and permission to conduct this research was granted by the Research Ethics Committee of the Faculty of the Humanities of the University of the Free State. Permission was also obtained from the other relevant authority bodies including the Free State Department of Education and the principal of the high school that participated in this research study.

Informed consent and assent (Appendix D) were attained in this research. The school was the primary liaison source between the researcher and the authority figures (parents) with regard to informed consent. In order to obtain assent, the learners were given a form containing the relevant information pertaining to the research, which included the following: the aim of the research, rights of the participants, responsibilities of the researcher and contact information for enquiries. The assent form was handed to the learners prior to the data collection instruments, which they had to sign when they had read through its contents and

were in agreement. This process was shortly followed by the researcher enquiring if the participants needed any further clarity before distributing the questionnaires. The researcher was transparent and did not misrepresent any relevant information.

Taking action to obtain consent and assent is necessary, as it is regarded as one of the ethical principles of ethical research (Butz, 2008). This ethical principle is considered fundamental in research, as it ensures that children's and adolescent's rights and welfare are protected when these populations are invited to partake in research (Al-Sheyab et al., 2019).

Anonymity and confidentiality were also considered. Anonymity refers to protecting the identity of participants, whereas confidentiality relates to ensuring that information provided by participants is not attributed to the respondents (Allen, 2017; Neuman, 2012). To ensure the anonymity and confidentiality of the participants and data the following steps were taken: the questionnaires did not require personal identifying information and the results were discussed in an aggregated manner.

Social research can potentially be harmful to participants in numerous ways, ranging from physical to psychological (Neuman, 2012). It is thus of importance that the researcher foresees the potential psychological and or physical harm of participants as a result of participation in the research (Bless et al., 2006), and ultimately assumes the responsibility to protect the welfare and safety of participants and to treat participants with fairness and respect (European Commission, 2018).

Psychological harm was the main potential risk in this research study. During the research process, the necessary steps were taken to ensure that the participants were not harmed. All

questionnaires used were standardised for the adolescent population and were not harmful in any way. The participants were also informed of the referral procedures to the relevant mental health professionals should they feel the need to discuss personal questions or concerns that might emerge from the research process.

# 4.7 Chapter Summary

In this chapter, the research methodology was discussed. The rationale was explained and the research gap was depicted. The aim of the research was stated, accompanied by the questions formulated to investigate the research aim. The overall research design employed in this research was discussed, including the various techniques utilised in data collection and analysis. The discussions in these sections included definitions of techniques, the advantages and disadvantage of each technique and, finally, the applicability of the techniques to this research study. The population from which the sample was drawn was discussed and sampling techniques were explained. This section was followed by an elaboration of the type of data collection instruments used in this research and a discussion on the psychometric properties of the scales and subscales. The chapter concluded with a description and explanation of the ethical considerations applicable to this research and the description of the statistical analyses utilised.

#### **CHAPTER 5: RESULTS AND DISCUSSION**

The focus of this chapter is to present and discuss the results as related to the research aim, which was to explore the relationship between career maturity and identity status in male and female adolescents in the South African context. The chapter commences with the results section, which encapsulates the outcomes of both the descriptive statistics and inferential statistical analyses. The discussion section follows and elaborates on the obtained results against the background of the foundational theories and other relevant literature. Finally, the chapter concludes with a brief summary.

#### 5.1 Results

The primary aim of this research study was to explore the relationship between identity status and career maturity in male and female adolescents in the South African context.

Accordingly, the following questions were proposed:

- 1. Are there significant differences in identity status and career maturity between male and female adolescents?
- 2. Can identity status explain a significant amount of variance in career maturity?

# **5.1.1 Descriptive Statistics**

The first section of the results presents the findings of the descriptive statistics which have been employed to summarise data on the continuous variables (career maturity, identity foreclosure, moratorium, identity diffusion, identity moratorium and identity achievement statuses) in a meaningful way. Table 2 presents the results for the minimum and maximum

scores, means and standard deviations for the career maturity scale and the subscales (diffusion, foreclosure, moratorium and achievement) of the identity statuses scale.

 Table 2

 Minimum, Maximum, Mean and Standard Deviation Scores (N = 362)

Variable	Minimum	Maximum	Mean	SD
Career Maturity	0	10	4.65	2.257
(possible scale range 0–10)				
Identity Diffusion	4	24	14.54	4.201
(possible scale range 4–24)				
Identity Foreclosure	4	24	14.91	4.250
(possible scale range 4–24)				
Identity Moratorium	4	24	15.65	4.417
(possible scale range 4–24)				
Identity Achievement	4	22	8.78	3.577
(possible scale range 4–24)				

On the career maturity scale, participants could obtain a score ranging from 0 to 10. In this research study, the participants' scores had a large range, from a minimum of 0 to a maximum of 10. The mean score on this scale was 4.65, while the standard deviation was 2.257. On the identity status subscales, participants could obtain a score ranging from 4 to 24. In this research study, the participants' scores had a large range on all the subscales. Participants obtained the highest scores on the identity moratorium subscale, with a mean score of 15.65 and standard deviation score of 4.417. Participants obtained the lowest scores on the identity achievement subscale, with a mean score of 8.78 and standard deviation of 3.577.

### **5.1.2 Inferential Statistics**

Inferential statistical analyses were conducted to answer the two research questions.

5.1.2.1 Gender Differences in Career Maturity and Identity Status. The first research question posed was whether there are significant gender differences in career maturity and identity statuses (namely identity diffusion, identity foreclosure, identity moratorium and identity achievement). The MANOVA which was conducted on the combined dependent variables yielded no significant results  $[F(5, 352) = 1.458, p = .203; \text{Wilks}' \land = 0.024]$ . Thus, no follow-up ANOVAs (to determine which dependent variables showed significant differences) were completed. This means that in this study, male and female adolescents did not show significant differences regarding career maturity and ego identity statuses.

5.1.2.2 Explanation for the Variance in Career Maturity. The second research question sought to explore whether ego identity status can explain a significant amount of variance in career maturity. To determine this, bivariate Pearson's product-moment correlation

coefficients (r) were calculated to assess the size and direction of the linear relationships between the variables, followed by standard multiple regression analysis. Table 3 presents the results of the correlational analyses which inform on the bivariate relationships between career maturity and the identity statuses (diffusion, foreclosure, moratorium and achievement).

**Table 3**Pearson's Product-Moment Correlation Coefficients among the Study Variables (N = 362)

Variable	1	2	3	4	5
Career Maturity (1)	1				
Identity Diffusion (2)	329**	1			
Identity Foreclosure (3)	101	.281**	1		
Identity Moratorium (4)	442**	.534**	.235**	1	
Identity Achievement (5)	.250**	024	.03	175**	1

Note: \*\* correlation is significant at the 0.01 level

As can be seen in the table, various significant relationships were observed between career maturity and the identity statuses (diffusion, foreclosure, moratorium and achievement). The diffused identity status was significantly and negatively related to career maturity [r(362) = -.329, p < .01]. The moratorium identity status was significantly and negatively related to career maturity [r(362) = -.442, p < .01]. The achieved identity status was significantly and positively related to career maturity [r(362) = .250, p < .01]. Lastly, there was no significant relationship between the foreclosed identity status and career maturity [r(362) = .101, p > .05]. Evidently, this analysis reveals the existence of

associations between identity status and career maturity. Furthermore, it was noted that the nature of the relationship varies with each identity status.

According to the standard multiple regression analysis, ego identity statuses (diffusion, foreclosure, moratorium and achievement combined) explain a significant amount of variance in career maturity [ $R^2 = .242$ , F(4,361) = 28.516, p < .000]. Thus, identity diffusion, foreclosure, moratorium and achievement jointly accounted for 24.2% of the variance in career maturity. When considering the unique individual contributions, three statuses (excluding foreclosure) showed significant results. Diffusion [ $\beta = -.152$ , t = -2.724; p < .000], moratorium [ $\beta = -.332$ , t = -5.936; p < .000], and achievement [ $\beta = .188$ , t = 3.990; p < .000] each uniquely explained a significant amount of variance in career maturity, with the moratorium identity status making the highest unique contribution. Diffusion negatively predicted career maturity [ $\beta = -.152$ , t(-2.724); p < .000]. This indicates that participants who self-perceive high diffusion also self-report with lower career maturity. Similarly, the results showed moratorium to negatively predict career maturity [ $\beta = -.332$ , t (5.936); p < .000]. This suggests that participants who self-perceive high moratorium also self-reported with lower career maturity. In contrast, the achieved identity status associates positively with career maturity [ $\beta$  = .188, t (3.99); p < .000]. This means that the greater the perception of identity achievement by participants, the more likely they were to self-report higher career maturity.

In summary, the results suggest that ego identity status can explain a significant amount of variance in career maturity, with a significant positive relationship between career maturity and the achieved identity status, and significant negative relationships between career maturity and the diffused and moratorium identity statuses.

#### 5.2 Discussion

This section of the chapter deliberates the results obtained in response to the primary aim of this research study, which was to explore the relationship between identity status and career maturity in male and female adolescents in the South African context. The discussion is grounded on the theoretical frameworks and other relevant literature.

### **5.2.1 Findings Related to the Descriptive Statistics**

Regarding the variable of career maturity, the participants in this research scored within the average range, which implies that they have not committed to a vocational identity.

This finding correlates with literature on career maturity during adolescence. Career maturity undergoes a great deal of significant development during adolescence (González, 2008), evidently fostered by the necessary academic decisions to be engaged (Salami, 2008). However, because the development of career maturity is typically an individually-oriented process influenced by a wide variety of interacting psychological and social factors (Bozgeyikili et al., 2009; Mubiana, 2014; Prideaux & Creed, 2001), individual differences are likely to occur.

Regarding identity, participants scored highest on the moratorium identity status and scored lowest on the achieved identity status. As noted, the majority of participants in this research study are within the ages of 15 to 17 years, which are considered to be middle adolescence (WHO, n.d). Thus, it is expected that the majority of the participants within this research study are yet to progress to the identity achievement status which is characterised by commitment and commonly noted in late adolescence.

# 5.2.2 Findings Related to Gender Differences on the Variables of Interest

In this research study, no significant gender differences were found for both identity status and career maturity. This implies that male and female adolescents in the South African context develop identity and career maturity in a relatively comparable manner. To draw conclusions on these findings the foundational theoretical frameworks and relevant literature are consulted.

Erikson (1960) and Marcia (1980) made reference to the factor of gender in their respective theories. The findings of this research study are favourable towards the sentiments of Marcia (1980), who proposes that the influence of gender in identity development is not similar across contexts, thereby suggesting that gender differences are evident from the social norms related to child-rearing in a particular context. Therefore, referencing Marcia's sentiments for the South African context, it can be concluded that identity development of adolescents in South Africa is not subject to gender differences.

Having not obtained significant gender differences in this context raises further questions, as the participants in this research study hail from collective and traditional cultural backgrounds which are typically associated with child-rearing practices and which may encourage gender differences in the outcomes of identity development (Kashima et al., 1995). One plausible explanation may be related to the recognised significant social changes in the South African context, which have had an impact in how the residents of this context define themselves (Arndt & Naudé, 2016). A significant factor of social change brought on by the democratic dispensation is the increased intercultural contact, which has likely diluted some cultural elements of the previously exclusively collective traditional societies. This therefore

impacts how adolescents of this context negotiate their journey of identity development (Mdikana et al., 2009), as a multicultural context presents with varied norms and values (Yampolsky et al., 2013). Consequently, adolescents in the South African context are crafting identities which reflect not only the primary influences of their cultural background, but equally so the influences imposed on them by other cultural groups. Such acculturation processes and the outcomes thereof are well associated with identity (Adams & van de Vijver, 2017).

As already noted, a similar pattern is evident with the variable of career maturity wherein no gender differences were obtained. On a contextual level, this finding suggests that male and female adolescents in the South African context are being reared in a context which does not enforce a gender differentiated approach towards the development of career maturity. Typically, gender differences would be noted if the context of development enforces different perceptions and cultural beliefs with regard to gender (Wesarat et al., 2016). This is more common among traditional societies which rear their men to assume the duty to be the primary provider, while women focus on raising the offspring (Kashima et al., 1995); therefore, females in these contexts are unlikely to develop career maturity as there are no career aspirations necessary. Clearly, these traditional approaches are not prominent in the South African developmental context.

# 5.2.3 Findings Related to the Explanation of Variance in Career Maturity

In this research study significant relationships between identity status and career maturity were observed. There were positive correlations between career maturity and achievement identity status, while negative correlations between career maturity and diffusion and moratorium identity statuses were noted.

These findings are in accordance with previous findings by Grotevant (1987), Munley (1975) and Skorikov and Vondracek (1998), which explored relations between identity status and career maturity and strongly suggested that there is convincing evidence of a relationship between these concepts. However, the nature of the relationship did not present in a similar nature with each identity status. This finding is in line with Golpich et al. (2009) and Salami (2008), who also found that career maturity in adolescents reflected differently according to identity status.

As such, achievement identity status was significantly and positively associated with career maturity. This finding is in line with the characteristics of this identity status, as adolescents classified according to this status have resolved the identity crisis and have carefully considered their options before making commitments (Kubeka, 2010; Luyckx et al., 2005). Based on the developmental literature, these adolescents are at a level of increased and realistic perspectives of abilities, aptitudes, interests, values and goals (Koo & Kim, 2016; Landine, 2013; Pellerone et al., 2015), which in turn enable the attainment of career maturity essential for the occupational domain of identity development. On a developmental level, a factor implicated in the positive relationship between career maturity and achievement identity development is cognitive development, as the attainment of these cognitive abilities empowers the capacity for the developmental activities of exploration and commitment in adolescence (Pellerone et al., 2015).

On the opposite end of the results, foreclosure ego identity status was found to have no relationship to career maturity. According to the characteristics of this identity status, these findings are to be expected. For instance, adolescents in foreclosure identity development have typically achieved commitment in the various domains of identity development;

however, this is usually done against a lack of exploration (Côté & Schwartz, 2002; Luyckx et al., 2005). Thus, adolescents classified according to this identity status may at face value appear to be career mature as they may present with commitments in the career domain. However, in-depth investigation of this seemingly present career maturity is likely to reveal low levels of self-effectiveness in choices and diversification of professional preferences and more dominance of the adopted parental views, attitudes and opinions to decision-making (Marcia, 1980; Mdikana et al., 2009).

The moratorium and diffusion identity statuses were also independently evaluated in relation to career maturity and were found to have a significant yet negative relation to career maturity. These results are congruent with the characteristics of these identity statuses. For instance, adolescents classified according to the diffusion ego identity status have not made any clear and sound commitments; additionally, no exploration of options is taking place (Luyckx et al., 2005). As a result, these adolescents typically procrastinate in making life choices such as those regarding career, and generally have to rely on external directives for the type of career they should embark on (Salami, 2008), a characteristic not well associated with career maturity.

Moratorium ego identity status characteristically reflects individuals with only active exploration of the various alternatives but with no set of commitments (Luyckx et al., 2005). In addition, the results showed that of the three identity statuses contributing to variance, moratorium identity contributed the highest to career maturity. A variety of possibilities can be offered to account for this finding, especially against the expectation that the achievement identity status, as reflective of the most advanced form of identity, would be expected to account for the largest contribution.

Over and above the individual characteristics of each identity status there are dynamics identified in literature which are known to have an influence on the outcomes of the identity statuses. Firstly, considering the socio-demographic factor of age, it is notable that participants of the age of 16 and above accounted for approximately 47% of participants in this study. Typically, this age is often considered as middle adolescence, thus it is not unlikely to exhibit the moratorium identity status, especially since it has been confirmed that the identity status model by Marcia reflects progress rather than a regression of identity. Thus, it can be assumed that middle adolescents have evolved from foreclosure and diffusion identity statuses, however, they have not reached achievement yet. Additionally, participants in this research study are from backgrounds which are considered collective and traditional, and it is known that in such societies institutionalised moratorium tends not to be embraced (Marcia, 1993). However, it is well recognised that the South Africa democracy afforded increased inter-cultural contact, which has also been confounded by globalisation, the result being that the traditional and collectivist nations have incorporated some of the individualistic Western values as well (Kumru & Thompson, 2003). This implies that it may no longer be uncommon to witness the phase of moratorium within this sample.

The fact that the sample of participants consisted of high school learners likely contributes to the moratorium status, as it is a life space which encourages exploration. For instance, learners in grade 9 are inherently encouraged to explore not only their personalities but also their career options, as they have to select school subjects that will not only carry them through high school but also influence their post-high school educational aspirations. By grade 10, learners may have to then continuously evaluate the fit between themselves and the subject choices. Finally, by grades 11 and 12 learners are again confronted by further

processes of exploration through having to apply for post-high school education options, although for some adolescents they have to explore their employment options post-high school due to financial constraints.

## 5.3 Chapter Summary

This chapter was divided into two interrelated sections. First, it commenced with presenting the obtained results according to the research aim and questions. The subsequent section focused on elaborating on the obtained results against theoretical frameworks and other relevant literature. It was established that there is a relationship between ego identity status and career maturity. The nature and significance of the relationship between these constructs presented differently in the identity statuses. For instance, diffusion and moratorium identity statuses presented a significant but negative relationship to career maturity, while identity foreclosure status had no relationship to career maturity. Only identity achievement status presented with a significant and positive relationship to career maturity.

### **CHAPTER 6: SUMMARY, LIMITATIONS AND RECOMMENDATIONS**

This is the concluding chapter of this research study. The primary aim of this chapter is to draw final conclusions on the key findings, discuss relevant limitations evidenced in this research study and make the necessary recommendations for future studies. Lastly, the chapter concludes with a brief summary.

# 6.1 Summary of Key Findings

The primary aim of this research study was to explore the relationship between identity status and career maturity in male and female adolescents in the South African context.

The following questions were investigated:

- 1. Are there significant differences in identity status and career maturity between male and female adolescents?
- 2. Can identity status explain a significant amount of variance in career maturity?

To provide answers to the stated questions, the desired sample was obtained through a convenience sampling method and totalled 362 adolescent participants. Following thereafter was the collection of data through a battery of questionnaires (biographic, OMEIS and CMI-SF). The relevant statistical analyses were performed in order to obtain the results. It was

established that identity development is positively associated with career maturity, in particular identity achievement identity status. This is to be expected, as a well-developed identity provides psychological tools which assist individuals to negotiate complex personal needs (Adams & van de Vijver, 2017) such as those related to career development. Therefore, even though career maturity can be encouraged through exposing learners to activities such as exposure to career expositions (Abdinoor & Ibrahim, 2019), the psychosocial task of identity development is clearly useful to the achievement of career maturity.

Furthermore, it was noted that the adolescents who were established to be in the achievement identity status were typically within the age ranges considered to be late adolescence. This finding is congruent to most literature, which indicates that this level of identity development is commonly identified in the advanced stages of adolescence and less common in early adolescence. This is in keeping to the developmental demands of this developmental phase. For instance, by late adolescence cognitive development is advanced, which makes possible the engagement of activities which lead to a well-developed identity as well as career maturity.

Moreover, the majority of the adolescents were found to be within the moratorium identity status, which is characterised by active exploration with no commitments. This suggests that the majority of the participants in this research study are currently still exploring their identities and have not yet reached the level of commitment. Therefore, if the most advanced level (achievement) of identity status is the only status positively associated with career maturity, low career maturity is to be expected with moratorium identify status.

Furthermore, the variable of gender was also considered, wherein a statistically non-significant gender difference was obtained between males and females on the combined dependent variables (career maturity and identity status). A similar finding was obtained wherein the dependent variables were considered separately. Thus, according to these results there are no significant differences in identity statuses and career maturity between male and female adolescents in the South African context.

### **6.2 Limitations of the Current Study**

In this section of the chapter, the various limitations identified are discussed. Reflecting on the limitations in a research study is an exercise of transparency which is useful for future similar studies (Ross & Zaidi, 2019).

Firstly, with reference to the foundational theoretical frameworks utilised in this research study, it is well documented that the theories referenced did not originate in contexts similar to South Africa. For instance, the Identity Status Theory by Marcia (1980), though hailed for its advancements in the understanding of the concept of identity, is however criticised for failure to broaden the cultural context, especially against the background of findings whereby cultural variations have been found to influence identity status (Ayeni et al., 2021). A similar criticism is labelled against the work of Erik Erikson (1960), wherein Sneed et al. (2006) question the applicability of his theory across subgroups.

For the variable of career maturity, related traditional theoretical approaches and their founding constructs have been reified (McIlveen & Patton, 2007). These revelations support an increasing notion that the applicability of classical theories in the 21<sup>st</sup> century should be reviewed (Samsanovich, 2021). Noteworthy is that criticism against these classical theories

further implicates the instruments used to obtain the data. As such, Young (2019) suggests a thorough investigation is needed for the predominant ontological and epistemological position of the foundational theory informing a survey.

Furthermore, although the research approach and design utilised in this research study were adequate to fulfil the primary purpose outlined, there are nevertheless limitations posed by these methods on the final outcomes. For instance, the research design of the study made it impossible to determine causality among the variables examined (Thompson et al., 2005). Thus, despite having established a relationship between identity status achievement and career maturity in this research study, the manner in which this relationship occurs cannot be accounted for.

There are also limitations regarding the sample. For instance, even though the sample is diverse in terms of age, grade and language, it is limited to high schools in the Mangaung area in the Free State province. This increased the probability that the study participants may be highly homogenous in several respects including attitude, values, customs and cultural orientation, which may affect the generalisation of the findings to learners in other districts, specifically within the Free State province but also other provinces in South Africa. Thus, generalisation of the outcomes of the study may have been strengthened (Polit & Beck, 2008) had the sample included adolescent students from the entire Free State province and or other provinces in South Africa.

Lastly, the data was collected through self-report measures. Researchers have expressed concern that this strategy for data collection is imbued with a high risk of response bias including faking of responses. The impact of response bias may create false or obscure

relationships between the variables (Van de Mortel, 2008) of identity status and career maturity. To overcome this challenge, future research may consider a mixed method approach in which participants fill a self-rated questionnaire and are interviewed personally to air their views on career maturity without the restrictions of forced responses as is common with self-rated questionnaires, thereby enhancing the generalisability of the findings reported in this research study.

In addition, in this research study, the Objective Measure of Ego Identity Status (OMEIS) demonstrated poor internal reliability both overall for the scale and also for the scores of the subscales, despite the removal of problematic items. Thus, future studies could consider the use of other versions such as the extended version of the OMEIS as used by Mashegoane (2012).

### 6.3 Recommendations for Future Studies

Against the background of the obtained results and the identified limitations in this research study the following recommendations are made.

Firstly, methodological considerations are especially drawn towards the use of instruments which may be deemed not context appropriate. As such, Laher and Cockcroft (2013) emphasise that caution should be practiced in the use of Western developed tests in contexts which are culturally different such as South Africa. Furthermore, in this research study the issue of language is considered, as participants indicated that their home language/s belonged to the Nguni category, while the instruments used were in the English language. Thus, future studies may consider the use of context-sensitive language instruments.

Regarding findings, it is noteworthy that achievement ego identity status was established to have a significant and positive relationship to career maturity in adolescents, as also confirmed by Salami (2008). Thus, it can be recommended that the various institutions such as the family and school environment should invest considerable effort into encouraging and nurturing processes of identity development in adolescents for the benefit of other domains of functioning such as occupational functioning.

Furthermore, it was established that the majority of the participants were within the moratorium ego identity status, which is commonly associated with active exploration, however, commitment is yet to be established (Upreti, 2017). The implication of exploration without commitment could have negative implications for the trajectory of adolescents' career development. Structured and guided exploration increases self-confidence along with a sense of personal urgency and ultimately commitment (Arnold, 2017). The study also found that male and female adolescent students were comparable on career maturity and ego identity status. This particular finding underscores the need for a non-gendered identity crisis resolution and career exploration intervention programme accessible to both male and female adolescent students.

### **6.4 Chapter Summary**

The primary purpose of this final chapter was to summarise the key findings and draw conclusions derived from these findings. Based on the results, it is concluded that achievement identity status is significantly and positively associated with career maturity and no gender differences were obtained in this regard. This suggests that both male and female adolescents engage in similar processes of identity development which inherently influence career maturity in a similar manner. The limitations of the research study were also

highlighted, focusing on the limitations of both the referenced theoretical frameworks and the utilised methodological approach. Finally, recommendations were made against the backdrop of the limitations presented.

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### Appendix A: Biographic Questionnaire

Gender			Male			Female	
Age	16	17	18	19	20	21	21+

What is your home language?	



## **Appendix B: Objective Measure of Ego Identity Status (OMEIS)**

Please respond to the following statements as honestly as possible.

	1 = strongly agree	2 = moderately agree	3 = agree	4 = disagree	5 = moderately disagree 6 = strongly disagree
1. I haven't really considered politics. They just don't excite me much.					
2. I might have thought about a lot of different things but there has never really been a decision since my parents said what they wanted.					
3. When it comes to religion I just haven't found any that I'm really into myself.					
4. My parents had it decided a long time ago what I should go into and I'm following their plans.					
5. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.					
6. I don't give religion much thought and it doesn't bother me one way or the other.					
7. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.					
8. I haven't chosen the occupation I really want to get into, but I'm working toward becoming a until something better comes along.					
9. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.					
10. It took me a long time to decide but now I know for sure what direction to move in for a career.					
11. I really never was involved in politics enough to have to make a firm stand one way or the other.					

12. I'm not so sure what religion means to me. I'd like to			
make up my mind but I'm not done looking yet.			
13. I've thought my political beliefs through and realize I			
may or may not agree with many of my parent's beliefs.			

	1 = strongly agree	2 = moderately	3 = agree	4 = disagree	5 = moderately disagree	6 = strongly disagree
14. It took me awhile to figure it out, but now I really know						
what I want for a career.  15. Religion is confusing to me right now. I keep changing my views on what is right and wrong to me.						
16. I'm sure it will be pretty easy for me to change my occupational goals when something better comes along.						
17. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.						
18. I've gone through a period of serious questioning about faith and can now say I understand what I believe in as an individual.						
19. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.						
20. I just can't decide how capable I am as a person and what jobs I'll be right for.						
21. I attend the same church as my family has always attended. I've never really questioned why.						
22. I just can't decide what to do for an occupation. There are so many possibilities.						
23. I've never really questioned my religion. If it's right for my parents it must be right for me.						
24. Politics are something that I can never be too sure about because things change so fast. But I do think it's important to know what I believe in.						



## **Appendix C: Career Maturity Inventory**

Read through the following statements and decide which is true in your life.	Agree	Disagr ee
1. I can't understand how some people can be so certain about what		
they want to do.		
2. I don't know what courses I should take in school.		
3. I know very little about the requirements of jobs.		
4. I really can't find any work that has much appeal to me.		
5. I often daydream about what I want to be, but I really have not		
chosen an occupation yet.		
6. Everyone seems to tell me something different; as a result I don't		
know what kind of work to choose.		
7. There are so many things to consider in choosing an occupation,		
it is hard to make a decision.		
8. I keep changing my occupational choice.		
9. I don't know how to go about getting into the kind of work I		
want to do.		
10. I am having difficulty in preparing myself for the work that I		
want to do.		



#### **Appendix D: Informed Consent Form**

Dear Participant

Thank you for your willingness to participate in this study. This study is part of the researcher's master's degree requirements. The purpose of this study is to explore ego identity status and career maturity in male and female adolescents.

Participation in this study is voluntary and should you feel the need, you may withdraw from the study at any time. All your identifying data will be held in the strictest confidence. While the data will be published, all information will be kept confidential and responses will be kept anonymous.

You will be expected to complete a survey battery and if you have any questions or concerns please feel free to talk to the facilitator.

Thank you

Siphesihle Mahlaba

#### **Informed consent**

I have read and understand the information on the form and I consent to volunteer to be a participant in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time.

# Appendix E: Turn It In Report

Dra	ft 3	
ORIGINA	ALITY REPORT	
	3% 10% 7% 6% ARITY INDEX INTERNET SOURCES PUBLICATIONS STUDENT F	PAPERS
PRIMAR	YSOURCES	
1	Submitted to University of the Free State Student Paper	2%
2	scholar.ufs.ac.za:8080 Internet Source	1%
3	Samuel Olayinka Salami. "Gender, Identity Status and Career Maturity of Adolescents in Southwest Nigeria", Journal of Social Sciences, 2017	1%
4	brainwaves.msmc.edu Internet Source	1%
5	Submitted to Webster University Student Paper	1%
6	Savickas, M. L., and E. J. Porfeli. "Revision of the Career Maturity Inventory: The Adaptability Form", Journal of Career Assessment, 2011.	1%
7	hdl.handle.net Internet Source	<1%