

The Role of Self-esteem in the Relationship between Ego Identity and Career Aspiration in Adolescents

by

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Yours faithfully



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Abstract

Choosing a career is a key aspect of transition for adolescents. In fact, South African adolescents experience unique challenges with regard to their career aspirations. In the midst of the unpredictability of careers, adolescents are expected to show increased self-directedness based on a well-developed ego identity. The formation of ego identity is one of the most important psychological tasks during adolescence. Indeed, adolescence is a critical stage characterised by intense exploration of ego identity. In the same breath, the development of self-esteem provides adolescents with a structure for deeper self-understanding – a crucial factor in determining individuals' career aspirations. The aim of this study was to explore the relationship between ego identity and career aspiration in adolescents. Furthermore, the possible mediating or moderating roles of self-esteem and gender in this relationship were investigated. A non-experimental type, quantitative approach with a correlational design was used in this study. Participants were recruited using non-probability, convenience-sampling methods. The final sample consisted of 336 adolescents aged between 14 and 17 years, of which 188 (56%) were females and 148 (44%) were males. The data for this study were collected using the *Ego Identity Process Questionnaire (EIPQ)*, the *Vocational Identity Measure (VIM)*, and the *Rosenberg Self-esteem Scale (RSES)*. The moderating role of gender was investigated first before proceeding with further analyses. Gender did not play a significant moderating role in the relationship between ego identity and career aspiration. The relationship between the measured variables was tested using Pearson's product moment correlation coefficient. Statistically significant positive correlations between ego identity, career aspiration, and self-esteem were found. A moderated hierarchical regression analysis was completed to determine the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration, with no statistically significant results. According to these findings, a well-developed ego identity and a favourable self-esteem contribute significantly to career aspiration during adolescence.

Keywords: adolescents, career aspiration, ego identity, gender, self-esteem

Résumé

Le choix d'une carrière est un aspect important de la transition pour les adolescents. En fait, les adolescents sud-africains rencontrent des défis uniques en ce qui concerne leurs aspirations professionnelles. Au milieu de l'imprévisibilité des carrières, les adolescents sont censés montrer une auto-orientation accrue basée sur une identité du moi bien formée. La formation de l'identité du moi est l'une des tâches psychologiques les plus importantes pendant l'adolescence. En effet, l'adolescence est une étape critique caractérisée par une exploration intense de l'identité du moi. Par ailleurs, le développement de l'estime de soi fournit aux adolescents une structure pour une meilleure compréhension de soi - un facteur crucial dans la détermination des aspirations à la carrière des individus. Le but de cette étude était d'explorer la relation entre l'identité du moi et l'aspiration à la carrière chez les adolescents. En outre, le rôle modérateur ou médiateur possibles de l'estime de soi et du genre dans cette relation a été étudié. Une approche quantitative, non expérimental avec une méthode corrélationnelle a été utilisée dans cette étude. Les participants ont été recrutés en utilisant des méthodes d'échantillonnage non probabiliste et de commodité. L'échantillon final comprenait 336 adolescents âgés de 14 à 17 ans, dont 188 (56%) étaient des femmes et 148 (44%) étaient des hommes. Les données de cette étude ont été recueillies à l'aide de questionnaire de l'identité du moi (*Ego Identity Process Questionnaire ; EIPQ*), de la mesure de l'identité professionnelle (*Vocational Identity Measure ; VIM*) et de l'échelle d'estime de soi de Rosenberg (*Rosenberg Self-esteem Scale ; RSES*). Le rôle modérateur du genre a été étudié en premier avant de procéder à d'autres analyses. Le genre n'a pas joué un rôle modérateur important dans la relation entre l'identité du moi et l'aspiration à la carrière. La relation entre les variables mesurées a été testée en utilisant le produit-moment de Pearson. Des corrélations positives statistiquement significatives entre l'identité du moi, l'estime de soi et l'aspiration à la carrière ont été trouvées. Une analyse de régression hiérarchique modérée a été effectuée pour déterminer le rôle modérateur ou médiateur de l'estime de soi dans la relation entre l'identité du moi et l'aspiration professionnelle, sans trouver des résultats statistiquement significatifs. Selon ces résultats, une identité du moi bien développée et une estime de soi favorable, contribuent de manière significative à l'aspiration à la carrière pendant l'adolescence.

Mots-clés : adolescents, aspiration à la carrière, identité du moi, genre, estime de soi

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Chapter 1– Context of the Study

During the transitional phase of adolescence, individuals are faced with a variety of important decisions, one of which is the choice of a future career. In addition to this, adolescents in contemporary South Africa are faced with a changing global economy and an increased demand for specialised skills. Thus, their career aspirations are dynamic and influenced by a variety of factors, which will ultimately have a direct bearing on their well-being and adjustment. Consequently, there is a need to explore factors that promote or hamper the career aspirations of adolescents. In this context, this study explores the moderating or the mediating role of self-esteem in the relationship between ego identity and career aspiration in adolescents.

In this chapter, the theoretical background of the study is reviewed. A general outline of the rationale and the aims of the study are provided. Subsequently, a brief discussion of the research methodology is presented. Last, a chapter outline of the study is given.

1.1 Background, Rationale, and Aim of the Study

Adolescence is a critical stage characterised by intense exploration during which it is an important task to define one's career plans (Erikson, 1968). However, the context in which adolescents find themselves today is a complex one (Joubert & Crous, 2005). Moreover, it is largely known that the world of careers is ever changing, and these changes tend to be overwhelming to individuals. Therefore, adolescents are overwhelmed not only by the expectations of society, but also by the turbulent, unpredictable, and confusing view of the world of work (Joubert & Crous, 2005).

South African adolescents experience unique challenges with regard to their career aspirations (Maree, 2016). Furthermore, the contemporary South African context is quite demanding, with the emergence of the post-industrial revolution, the dawn of information technology, and professional competition (Maree, 2016). Therefore, the development of career aspiration is associated with uncertainty (Joubert & Crous, 2005). More than ever before, the choice of one's career among diverse options becomes a very demanding task for adolescents (Chemeli, 2013). Inevitably, these conditions make the choice of a career exceptionally challenging for adolescents (Chemeli, 2013; Meijers & Lengelle, 2016).

In particular, in democratic South Africa, there are significant economic, social, and political changes. These changes may affect individuals' career aspirations (Buthelezi,

Alexander, & Seabi, 2009; Ortlepp, Mahlangu, Mtshemla, & Greyling, 2002). In effect, career aspiration is influenced by contextual factors including educational, cultural, economic, and political aspects (Ortlepp et al., 2002). In the South African context, individuals from disadvantaged groups have experienced unequal access to schooling and profession opportunity due to past apartheid inequalities (Buthelezi et al., 2009; Ortlepp et al., 2002). Consequently, learners tend to aspire to educational and social fields in spite of the current South African career needs in technical, mathematical, and scientific fields (Meijers & Lengelle, 2016). This is the case for many black learners living in informal settlements and attending local schools. A number of factors explain these learners' career aspirations. Firstly, there is lack of career guidance and discriminatory access to educational resources. Secondly, these learners are exposed to fewer career opportunities, fostered by a lack of exposure to a broader and more enriched range of role models and educational resources. Lastly, there is lack of a strong community-based value system in this group of learners (Ortlepp et al., 2002). However, educational policies have changed greatly in post-apartheid South Africa (Department of Education, 2001, 2002). Therefore, given the complexity of career aspiration, one should go beyond contextual factors. Consequently, other factors such as ego identity, self-esteem, and gender need to be examined, as they might account for significant changes in career aspiration (Fang, 2016; Migunde, Agak, & Odiwuor, 2012; Simpkins, Fredricks, & Eccles, 2015; Sung, Cheng, & Wu, 2016; Tsang, Hui, & Law, 2012).

In the midst of the unpredictability of careers, adolescents are expected to show increased self-directedness based on a well-developed ego identity (Kuijpers & Scheerens, 2006; Maree, 2010). In this respect, the formation of ego identity is an essential process during adolescence (Erikson, 1968). The development of ego identity, which is triggered by societal demands, has been found to correlate positively with career aspirations (Beal & Crockett, 2010; Marcia, 1967; Migunde et al., 2012). In this connection, the formation of ego identity during adolescence is viewed as an important process in formulating clear goals, values, and beliefs (Fang, 2016).

It has been noted that people tend to have career aspirations corresponding with their perception of self (Malanchuk, Messersmith, & Eccles, 2010). Self-esteem is the perception of self as a worthwhile and competent person (Amazue, 2014; Rosenberg, 1965). Peoples' beliefs about who they are, are also shaped by their social realities. In this regard, high self-esteem has been correlated with better social skills, whereas people with low self-esteem were found to conform easily to false opinions about self (Baumeister, 2003). Additionally, high self-esteem has been associated with self-confidence, academic achievement, and social

acceptance (Idemudia, 2013). In this perspective, self-esteem is regarded as an influential factor enabling adolescents to choose careers successfully (Aro & Nurmi, 2007). Despite the vast amount of research on adolescents' self-esteem, little is known of its role as a moderator or mediator in relation to ego identity and career aspiration in a South African context, which warrants further studies.

Career aspiration can be influenced by gender (Crawford, 2012; Domenico & Jones, 2007). In the past, gender role differences were observed with regard to the choice and consideration of careers (Ekore, 2014; Ganginis Del Pino, O'Brien, Mereish, & Miller, 2013). Males and females are inclined to choose different careers, as they do not value the same aspects of work. In fact, for many years, gender roles have had significant influence in the career aspirations of individuals (Meeus, Van de Schoot, Keijsers, Seth, & Branje, 2010). In addition, it has been noted that males prefer realistic and investigative careers, whereas females prefer social, conventional, and artistic careers (Migunde et al., 2012). These differences in career preference have been associated with socialisation in various cultures where some careers are not considered appropriate for a specific gender (Migunde et al., 2012; Weis, Firker, & Henning, 2007) because of gender stereotyping that is held by the society. Consequently, males continue choosing careers related to traditional gender roles, and females opt for careers suiting their traditional gender role (Ekore, 2014; Migunde et al., 2012; Weis et al., 2007).

Nevertheless, there are contrasting opinions with regard to studies on gender differences in career aspirations. It is well documented that males and females tend to have similar career interests (Crawford, 2012). Moreover, large numbers of females aspire towards male-dominated careers, whereas males also aspire towards formally, female-stereotyped choices. Therefore, more information is needed regarding gender role differences during adolescence, especially in a South African context (Maree, 2016).

When considering the relationships between ego identity, career aspiration, and self-esteem, various opinions exist. Firstly, in previous research studies, there is an indication that self-evaluation capacity foretells educational choices, outcomes, and aspirations (Fang, 2016). Moreover, it is speculated that a high self-esteem during adolescence is a stepping-stone in dealing successfully with major developmental challenges, such as choosing a career (Aro & Nurmi, 2007). Hence, it has been noted that people aspire to careers that are consistent with their self-image (Malanchuk et al., 2010).

Second, in the available body of research, the role of self-esteem in the relationship between ego identity and career aspiration has been highlighted (Fang, 2016). It has been found that adolescents with achieved ego identity statuses seem to be more aware of their strengths and flaws, which might strengthen their self-esteem (Beyers & Luyckx, 2016), which, in turn, will affect their career aspirations. Nonetheless, many of these associations are still under researched (Maree, 2010), especially in South Africa (Schreuder & Coetzee, 2012). Therefore, more information is needed regarding these important decision-making processes during adolescence (Maree, 2010).

Thus, the aim of the present study is to explore the role of self-esteem in the relationship between ego identity and career aspiration in male and female adolescents. The moderating role of gender was explored first before running a moderated hierarchical regression analysis to investigate the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration in male and female adolescents.

The following research questions were examined:

1. Does a significant relationship exist between ego identity, career aspiration, and self-esteem in adolescents?
2. To what extent does self-esteem moderate or mediate the relationship between ego identity and career aspiration in adolescents?

1.2 Overview of the Research Methodology

The current study was conducted using a non-experimental type of quantitative research, with a correlational design. Data obtained by means of quantitative research approach is regarded as objective, and it can be analysed and interpreted statistically (Maree, 2011; Stangor, 2015). This study was non-experimental in nature since control groups and experimental groups were not used, with no intervention (Maree, 2011). In addition, a systematic evaluation of the relationship between variables was rendered possible by using a correlational design (Stangor, 2015). A correlational design was particularly suitable in this study, since it aimed at establishing the strength and direction of the relationship between career aspiration, ego identity, and self-esteem. Furthermore, it enabled the researcher to investigate the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration.

A non-probability convenience sampling technique (Maree, 2011) was employed to collect data from adolescents from a high school located in the Mangaung area in the Free State, South Africa. The sample comprised both male and female learners, and only fully completed questionnaires were included. The final sample consisted of 336 participants aged between 14 and 17 years.

Data were collected using self-report batteries. Biographic questionnaires were used to obtain demographic information of the participants. The *Vocational Identity Measure (VIM)* (Gupta, Chong, & Leong, 2014) was used to operationalise the construct *career aspiration*. The *Ego Identity Process Questionnaire (EIPQ)* (Balistreri, Busch-Rossnagel, & Geisinger, 1995b) was used to measure ego identity. To assess self-esteem, the *Rosenberg Self-esteem Scale (RSES)* (Rosenberg, 1965) was used.

Cronbach's alpha coefficient was used to determine the internal reliability of the *VIM*, the *EIPQ*, and the *RSES* for this sample. The descriptive statistics were calculated to illustrate the central tendencies in the obtained data. A summary of the demographic data was made in a frequency distribution table. In addition, standard deviations and the means were calculated to describe the continuous variables. The moderating role of gender was explored, followed by the calculation of the Pearson's product-moment correlation coefficient (r) (Howell, 2014) to establish the relationship between the measured constructs. A regression analysis (Howell, 2014) was conducted to investigate how much of the variance in career aspiration could be explained by ego identity and self-esteem. A moderated hierarchical regression analysis was made to investigate the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration.

Ethical clearance was obtained from the Research Ethics Committee of the Faculty of the Humanities of the University of the Free State, and authorisation was obtained from the Department of Education and the school principal. Participants provided written informed consent to ensure the voluntary nature of their participation in the study. There were no potential physical risks with regard to this study; however, debriefing sessions were made available for the participants. Confidentiality was respected, and the information was stored securely.

1.3 Delineation of Chapters

Chapter 1: In this chapter, a brief description of the entire study is provided. A general overview of the rationale and the aim of the study are presented. The theoretical perspective

of the study regarding career aspiration, ego identity, and self-esteem is elaborated in relation to the South African context. In addition, the research design, methodology, and data analysis are highlighted. Finally, a brief elaboration of ethical procedures is given, followed by a delineation of the chapters of the study.

Chapter 2: The constructs *career aspiration*, *ego identity*, and *self-esteem* are reviewed in this chapter. Firstly, the constructs and their components are defined, followed by various theoretical aspects related to the development of these constructs during adolescence. Second, an overview of factors enabling or hampering the development of career aspiration, ego identity, and self-esteem is provided. Next, gender differences in the development of these constructs are discussed. Last, the correlation between these constructs is explored.

Chapter 3: In this chapter, the focus is to give an overview of the research methodology used in this study. The research rationale, purpose, and aim of the study are discussed, followed by an elaboration of the research design and approach. In addition, the inclusion and exclusion criteria are explored, and the data-collection and data analysis procedures are explained. Finally, ethical considerations and a chapter summary are presented.

Chapter 4: This chapter is divided into two sections, of which the first deals with the results and the second with discussing the results. First, the results of the study are presented using descriptive and inferential statistics. In the descriptive statistics section, a summary of the central tendencies, dispersion, and distribution of the observed scores is presented. In the inferential statistics section, results relating to the research questions are presented. The results are discussed based on existing literature in the field of study.

Chapter 5: In this chapter, the key findings of the study are discussed. Next, the limitations of the current study, recommendations for future research studies, and a brief conclusion are presented.

1.4 Chapter Summary

In this chapter, the aim was to present a broad overview of the context of the study. The background and rationale for the study were discussed, followed by an overview of the theoretical aspects of the study. The research design and procedures were provided. Last, an overview of all the chapters was provided.

Chapter 2 – Literature Review

In this chapter, the focus is on the constructs career aspiration, ego identity, and self-esteem. The different sections of the chapter have a similar layout. First, the definition and conceptualisation of the constructs are provided, followed by a brief discussion of the development of career aspiration, ego identity, and self-esteem during adolescence. Factors determining the development of career aspiration, ego identity, and self-esteem during adolescence are highlighted. Moreover, gender differences in the development of these constructs during adolescence are elaborated briefly. Finally, the contents of this chapter are summarised.

2.1 Career Aspiration

In this section, the construct *career aspiration* is defined and conceptualised. Furthermore, the research of influential career theorists is summarised. Additionally, career aspiration development during adolescence is highlighted. Finally, the factors that contribute to career aspiration and gender differences in career aspiration are provided.

2.1.1 Defining career aspiration and its components. Career aspiration can be defined as the awareness that people have of their constant patterns of career interests, abilities, and goals (Gupta et al., 2014). Career aspiration is referred to as expressed interests (Hirschi, 2010b), and is described as directive processes representing future oriented personal goals that are motivational and evaluative in nature (Hirschi, 2010b).

In line with Holland's (1985) theory, career aspirations can be defined as the expression of motives, needs, and behavioural goals with regard to diverse career fields (Stead & Watson, 2015). Career aspiration is also defined as future-oriented visions of what individuals will achieve in different domains of life, and it emerges from the combination of experiences of life (Ashby & Schoon, 2012; Holland, 1985).

2.1.2 Theories on career aspiration and development. Super and Holland are prominent researchers in the field of career development. Each of their theories explains how individuals determine their future career paths. Super (1990) took a developmental approach to explore career aspirations. Holland's theory focuses on particular dimensions of individuals' lives and how these dimensions influence career aspirations (Stead & Watson, 2015).

2.1.2.1 Super's career development theory. Super (1995) defines career aspiration as expressed career intentions and goals, reflecting individuals' career identity or self-concept. Moreover, people's career identity is typically reflected in their expressed career aspirations, which are determinants of future occupational choices (Hirschi, 2010b).

According to Super (1990), people move through a series of five stages of career aspiration, each requiring the accomplishment of different career developmental tasks. He argues that, from the age of 4 until the age of 13, an increased focus on individuals' career aspirations is sustained by individuals' personal control, academic achievements, competent work attitudes, and habits (Stead & Watson, 2015). At the age of 14 to 24 years, career aspiration is translated into actions. Hence, individuals engage in deliberate actions, such as studying and seeking employment as a way of concretely implementing their career aspirations (Stead & Watson, 2015).

2.1.2.2 Holland's career typology. Holland's (1985) career theory is based primarily on how career choices are linked to individuals' personality. Furthermore, Holland introduces the notion of congruence, which is associated with the degree to which individuals' personal qualities match the environmental demands, and it is regarded as environment fit (Stead & Watson, 2015). Holland believes that a good fit between individuals' personality and the environment may result in greater career satisfaction (Holland, 1985; Stead & Watson, 2015).

Holland (1997) proposed six types of career environments, parallel to six personality characteristics associated with each career environment. The six personalities and environment types are organised geometrically in a hexagonal model that includes the realistic, investigative, artistic, social, enterprising, and conventional types (Holland, 1997).

Realistic individuals are interested in working in a technical career environment. Individuals who fit into the investigative type seek to understand the physical and biological environment (Holland, 1997). To be able to control the environment around them, investigative individuals engage in scientific and scholarly activities. Artistic individuals prefer free, unstructured activities and value working in an aesthetic environment. They are described as imaginative, original, expressive, and emotional (Stead & Watson, 2015). Social types have a greater interest in people. They feel gratified working in helping professions (Holland, 1997). Enterprising individuals tend to be more business oriented and prefer leadership positions. They are very confident and enjoy persuading people (Stead & Watson, 2015). Conventional people are organised, conforming, and orderly. They like structured and systematic environments (Holland, 1997; Stead & Watson, 2015).

According to Holland (1985), people project their views of themselves and the world of work on their aspired careers. Moreover, Holland's theory shows a link between personality traits and individuals' career aspirations, which are congruent with their personal qualities. Consequently, career aspiration is also regarded as work preferences given ideal conditions (Stead & Watson, 2015).

2.1.3 Career aspiration development during adolescence. Adolescence is a crucial developmental stage during which individuals explore and plan for their probable career paths (Beal & Crockett, 2010; Cheung, Wan, Fan, Leong, & Mok, 2013). As a matter of fact, career choice is an essential decision during adolescence, critical to the transition into adulthood (Malanchuk et al., 2010). To this effect, career aspirations not only play an important role in the accomplishment of adolescents' goals and interests, but also influence their quality of future life (Ekore, 2014; Migunde, Agak, & Odiwuor, 2011). Moreover, career aspiration during adolescence is regarded important for successful career development (Erikson, 1968).

The development of career aspiration occurs in clearly marked periods. Ginzberg (1952) postulates that early adolescents aged 11 to 14 years are in the tentative stage, which is characterised by choices based on interests, but not guided by realistic values (Migunde et al., 2011). The realistic period ranges from 14 to 24 years of age. Adolescents fall in the exploration stage of the realistic period. Adolescents evaluate their career aspirations by gradually narrowing options and choosing desired careers (Gottfredson, 2002; Hirschi, 2010b). Most importantly, this process is facilitated by cognitive development relating to adolescents' self-concept and perceptions of different careers (Gottfredson, 2005; Migunde et al., 2011).

2.1.4 Factors that influence career aspiration development. Adolescents aspiring for particular careers are required to distinguish among multiple possibilities. Career aspiration development in adolescents can be influenced by a myriad of factors. Individuals' decisions can be influenced by either intrinsic or extrinsic factors or both (Kochung & Migunde, 2011; Stead & Watson, 2015). Some adolescents choose to follow their passions by exploring careers that subsequently lead to their desired career paths, while others are influenced by external factors (Kochung & Migunde, 2011).

2.1.4.1 Extrinsic factors to career aspiration. An individual's context, including the social and environmental system, may affect career aspiration significantly (Savickas & Lara, 2016). Environmental demands profoundly affect the content and timing of adolescents' career aspiration (Hirschi, 2010a). Factors such as family, ethnic and gender discrimination,

socio-economic status, technological development and globalisation have been noted to have a significant influence on individuals' career aspirations (Buthelezi et al., 2009; Savickas & Lara, 2016).

Adolescents tend to model their career aspirations from their parents (Metz, Fouad, & Ihle-Helledy, 2009). Typically, parents are the main socialisation agents who act as role models, shape the beliefs and expectations of their children, and thus influence the development of career aspirations (Cheung et al., 2013). Furthermore, factors such as academic support from schools and families can buffer career aspirations and educational choices (Simpkins et al., 2015). Thus, the interactions with parents and teachers are likely to modulate adolescents' self-appraisal and increase their sense of autonomy, competence, and drive to accomplish their goals. The development of career aspiration is affected by the culture in which one lives and by the family in which one is born (Savickas & Lara, 2016). For instance, people born in families of high achievers will probably have high career aspirations (Migunde et al., 2011). Career aspirations can influence adolescents' wellbeing, thus adolescents with high career aspirations are said to be less hopeless and more goal directed in choosing careers (Dudovitz, Chung, Nelson, & Wong, 2017).

Some adolescents think more concretely about the career world and are more prone to aspire to careers either because of high salaries or for prestige purposes (Lupart, Cannon, & Telfer, 2004). Similarly, limited exposure to positive role models and the few encounters with different professionals might affect adolescents' career aspiration, given the pivotal role of modelling in the development of career aspiration (Stead & Watson, 2015).

Moreover, there is evidence that, ethnic and gender discrimination might compromise adolescents' career aspirations (Metz et al., 2009). Similarly, financial resources, general economic conditions in society, and educational opportunities would also exert some influence on individuals' choices and may affect their ability to make optimal career decisions (Migunde et al., 2011).

Ashby and Schoon (2012) attest that family support and socioeconomic backgrounds have a significant effect on the development of career aspirations. Maree (2016) found that adolescents having a healthy parental relationship show self-efficacy, positive attitude, and autonomy, which positively influence their career aspirations. However, youths from lower-income families that face limited opportunities may aim high but lower their career objectives due to financial constraints. These contexts often restrict development of career aspiration by affecting peoples' self-efficacy beliefs negatively. As such, contextual factors may limit black

adolescents' career aspirations (Buthelezi et al., 2009). Likewise, career aspiration in adolescents is affected equally by technological development and globalisation (Kochung & Migunde, 2011).

2.1.4.2 *Intrinsic factors to career aspiration.* Intrapersonal factors ranging from personal interests, self-concept, and indecisiveness also affect development of individuals' career aspiration (Kochung & Migunde, 2011). Additionally, life experiences affect people's self-concept, which may affect individuals' career aspirations positively or negatively (Stead & Watson, 2015).

According to career theorists, knowledge about the self and the world of work will affect the decision-making process of individuals (Moerdyk, 2015). Therefore, if people have only vague ideas about the occupational environment, it may lead to self-doubt and indecisiveness. Hence, career aspirations should be inspected with respect to self-knowledge and knowledge of the job market (Holland, 1985; Metz et al., 2009; Super, 1980).

Further, Erikson (1968) posits that development of adolescents' career aspirations may be affected by the process of exploration. Hence, it is important to note that the decision making process is facilitated by exploration and elaboration of career choices during adolescence (Vignoli, 2015).

According to the social-cognitive career theory, development of career aspiration is associated with activities and objectives that develop from the person's interests and aptitudes (Stead & Watson, 2015). Therefore, perceived self-efficacy is a key element in the development of career aspiration. In effect, it is a motivational factor in choosing and maintaining a particular career path (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). Hence, having a clear picture of one's career aspirations, and setting achievable goals is also influenced by self-efficacy (Cheung et al., 2013).

People with a strong vocational identity have a clearer picture of their career goals, interests, abilities, and will be more successful in identifying appropriate careers for themselves (Holland, 1997). In the prior literature, vocational identity has been studied as a predictor of various outcomes. For instance, Savickas (1993) found that those with a stronger vocational identity reached identity foreclosure earlier, had clear career aspirations and thus, made career decisions earlier.

2.1.5 Gender differences in development of career aspiration. Several authors (Ekore, 2014; Ganginis Del Pino et al., 2013) highlight the influence of gender role in the choice and consideration of careers. According to the traditional point of view, individuals' preferences of and aspirations to certain jobs are rooted in cultural beliefs about gender, which shape women's and men's perceptions of their own competences and career- relevant tasks (Ashby & Schoon, 2012; Migunde et al., 2012; Schuette, Ponton, & Charlton, 2012; Stead & Watson, 2015). For instance, from an early age, children begin to have ideas about their career aspirations that are consistent with their emerging self-concepts. Consequently, males choose traditionally masculine occupations, and females choose traditionally female occupations (Ashby & Schoon, 2012; Migunde et al., 2012; Schuette et al., 2012; Stead & Watson, 2015).

According to Super (1980), it is important to note that considering women as homemakers plays a key role in gender-typed career choices. Therefore, family commitments play an essential role in structuring the possibilities and limitations of women's career aspirations. Consequently, many adolescents inclined to traditional gender norms aspire towards gender-stereotyped choices (Sigelman & Rider, 2015). Thus, expected to marry and start families, women tend to set their vocational sights low; therefore, they aspire to low-esteemed career positions that will enable them to juggle work and their family commitments (Metz et al., 2009; Migunde et al., 2011). Moreover, females are more inclined to aspire to careers with the idea of wanting to make the world more humane (Lupart et al., 2004).

However, women have made immense progress towards equality with men in the work field (Lupart et al., 2004). In fact, females and males tend to aim for careers that are similar (Migunde et al., 2011). For example, adolescent girls aspire to masculine careers, while some boys show interest in traditional feminine jobs (Francis, 2002). More young women than before aspire towards high status and male-dominated occupations. Females are confident and believe that they can engage in any career (Lupart et al., 2004). Furthermore, some learners aspire to male-stereotyped careers because they associate them with high salaries and high social status (Francis, 2002). Thus, women and men may have similar motivations to attain their goals and accomplish their career interests but are shaped and channelled in different directions by either parental reinforcement or by beliefs about gender roles (Crawford, 2012).

A dichotomy in career aspiration still persists, probably influenced by early socialisation of children to appropriate gender-type behaviours (Sigelman & Rider, 2015). Thus, gender is a major factor in the way that people see occupations, which consequently may affect career aspirations in adolescents (Lupart et al., 2004; Migunde et al., 2011).

2.2 Ego Identity

In this section, the focus is on defining and conceptualising the construct *ego identity*. Factors contributing to the development of ego identity during adolescence are explored. Finally, gender differences in developing ego identity are highlighted.

2.2.1 Defining ego identity and its components. The search for ego identity is a central developmental task, especially during adolescence (Erikson, 1968; Romi & Simcha, 2009). Erikson (1968) defines ego identity development as a process through which adolescents achieve a coherent sense of self and the ability to question values, beliefs, and future goals. Furthermore, ego identity is also defined as the complex notion of one's uniqueness that is formed gradually by a variety of social and psychological processes (Malanchuk et al., 2010). In addition, Marcia (1966) defines ego identity based on exploration and commitments made regarding the fields of occupation, religion, and politics (Balistreri et al., 1995a).

2.2.2 Theories on ego identity development during adolescence. Erikson's (1968) theory of psychosocial development is regarded as the basis of theories on development of ego identity. Marcia (1966) elaborates on the Eriksonian psychosocial development theory. His theory on ego identity development expands on exploration and commitment variables (Balistreri et al., 1995a).

2.2.2.1 Erikson's psychosocial development theory. According to Erikson (1968), the formation of ego identity follows a developmental course of ego growth. This process of ego development involves substituting childhood identifications with new configurations greatly subjective by society.

From an Eriksonian perspective, the formation of ego identity is crucial to one's personality development (Kroger & Marcia, 2011; Schultz & Schultz, 2009). Erikson (1968) affirms that ego identity is a process of attaining a clear sense of self-perception, as well as having clear goals about one's future. Consequently, a sense of ego identity is achieved by exploring, questioning beliefs, values, and goals that the society offers and committing to them through a unique personal experience (Crocetti, Sica, Schwartz, Serafini, & Meeus, 2012).

Erikson (1968) describes the ego-development process according to the epigenetic principle, which implies that ego identity is structured according to earlier stages of ego development. Moreover, Erikson highlights the integration of biological and social factors as

determinants of individuals' ego identity development (Schultz & Schultz, 2009; Syed & Mclean, 2016).

Erikson's theory of ego identity development is categorised into eight stages, each involving personal conflicts arising from environmental demands (Schultz & Schultz, 2009). In his opinion, individuals are required to refocus their energy in order to meet the needs of each stage in an attempt to resolve that particular crisis for each developmental stage (Erikson, 1968). Further, a successful resolution of each crisis guarantees a positive outcome and smooth passage from one stage to the other (Schultz & Schultz, 2009). Inevitably, adolescents are expected to achieve a stable sense of self. This implies that adolescents have to think about their future plans with regard to career, relations, values, and beliefs. Therefore, adolescents, experience an ego identity crisis (Sica, Crocetti, Ragozini, Sestito, & Serafini, 2016).

Erikson (1968) claims that ego identity is the self-image people form during adolescence, which is an integration of ideas about what they are and what they want to be. When successfully resolved, adolescents develop a consistent picture congruent to their career aspirations, values, and beliefs, achieving a cohesive ego identity (Syed & Mclean, 2016). However, adolescents who fail to achieve coherent values, goals, and commitments experience ego identity crisis (Beyers & Luyckx, 2016).

2.2.2.2 Marcia's theory on ego identity statuses. Although the Eriksonian approach to ego identity is quite comprehensive, it does not describe the construct in quantitative terms (Beyers & Luyckx, 2016). Marcia (1966) provides an operationalisation of Erikson's theory.

Building upon Erikson's work, Marcia (1966) argues that the process of ego identity comprises four identity statuses: diffusion, moratorium, foreclosure, and achievement. The statuses mentioned are explained according to the processes of identity exploration and commitment (Marcia, 1966; Meeus, 2011). Identity exploration entails an active examination of different roles and ideologies prior to finding the best fit (Pinquart & Pfeiffer, 2013). Commitment consists of re-evaluating several alternatives, making a firm choice in an identity domain, and engaging in significant activities to accomplish the decision (Marcia, 1967; Pinquart & Pfeiffer, 2013).

Marcia (1966) maintains that adolescents experiencing identity diffusion have not yet undergone an identity crisis or explored different avenues actively; therefore, they have not made any commitments. On the contrary, adolescents in the identity-foreclosed status have

already committed but without searching, questioning, and weighing different alternatives. Most of them assume their parents' beliefs, goals, and values with no prior exploration of other choices (Pinquart & Pfeiffer, 2013).

In addition, the moratorium status represents adolescents who have actively explored but not yet committed (Pinquart & Pfeiffer, 2013; Sigelman & Rider, 2015). If individuals can raise questions and find answers, they move to the achieved ego identity status. Ego identity achievement entails actively exploring, weighing of alternatives, and achieving a consolidated sense of self (Pinquart & Pfeiffer, 2013; Sigelman & Rider, 2015). Therefore, ego identity achievement is attained when people have lucid, integrated, and firm goals and they have committed to chosen avenues (Stead & Watson, 2015).

2.2.2.3 Other theorists on ego identity development. Erikson's theory, as well as Marcia's model of ego identity formation emphasising the underlying processes of commitment and exploration, remain valid. Various other researchers have refined Erikson and Marcia's theory and elaborated on a variety of ways to consider ego identity development (Beyers & Luyckx, 2016).

According to the identity styles model proposed by Berzonsky (1989), people use different types of socio-cognitive approaches to deal with or avoid the ego identity-formation task. Individuals tend to use either an informational, normative or diffuse-avoidant approach to forming ego identity (Sica et al., 2016). For instance, informational-oriented adolescents seek to understand, are problem focused, open to information, and review available avenues for forming a stable ego identity. Normative-oriented adolescents are scared to venture because they feel threatened. Consequently, it compromises the forming of their ego identity. Finally, diffuse-avoidant adolescents tend to procrastinate, and others easily influence them (Kunnen, 2009; Sica et al., 2016).

Luyckx, Goosens, and Soenens (2006) also explored the processes of exploring and committing to ego identity. According to them, ego identity develops following four phases: exploration in breadth, commitment making, exploration in depth, and identification with commitment. In turn, these processes are divided into two cycles: forming of ego identity and evaluation of commitment (Luyckx et al., 2006). Forming ego identity formation is the first cycle, which involves exploration in breadth, implying that adolescents engage in active questioning and consider different alternatives (Beyers & Luyckx, 2016). Second, commitment making means that adolescents adhere to a given alternative after thoughtful exploration. In a second cycle of ego identity formation, adolescents deal with existing

commitments by evaluating commitment. This cycle entails in-depth exploration consisting of exploring and evaluating current commitments. Finally, identification with commitment requires mastering the identified commitment (Beyers & Luyckx, 2016).

Other types of exploration and commitment also determine the forming of ego identity (Beyers & Luyckx, 2016; Crocetti, Rubini, & Meeus, 2008). In the opinion of Beyers and Luyckx (2016), adolescents use the processes of in-depth exploration and reconsideration of commitment to evaluate already existing commitments. Adolescents going through the process of reconsidering tend to review their current but unsatisfactory commitments, comparing them with probable alternatives (Crocetti et al., 2008; Meeus, 2011; Meeus et al., 2010).

The discussed models emphasise a healthy process of forming ego (Beyers & Luyckx, 2016). However, factors hindering healthy commitment have been identified. For instance, reconsideration of commitment and ruminative exploration are considered as risk factors to a well-adjusted ego identity (Beyers & Luyckx, 2016; Cramer, 2016; Crocetti et al., 2012). Hence, it has been noted that adolescents high in ruminative exploration find it difficult to make commitments when it comes to questions of identity. They are inclined to be overly anxious. Thus, reconsideration of commitment and ruminative exploration predict weak commitments in ego identity formation (Beyers & Luyckx, 2016).

2.2.3 Factors that influence ego identity development. In this section, the discussion centres on the different factors that contribute positively or negatively to the forming of individuals' ego identity. The family structure, parenting styles, and social support are explored.

2.2.3.1 Family systems and the development of ego identity. The family is an indispensable structure of socialisation during all developmental stages (Sigelman & Rider, 2015). It is a milieu of learning and growth in all domains of life for individuals to acquire skills necessary to adapt to their social environment (Geldard & Geldard, 2010). According to Bronfenbrenner (1989), the family forms part of the microsystem of the developing individual and it significantly affects individuals' well-being. Additionally, it may influence the development of ego identity in adolescents (Benson & Johnson, 2009). The family system often provides adolescents with a secure base for exploration (Sigelman & Rider, 2015). Thus, adolescents feel confident to try out roles and work on their belief systems and values, which build their ego identity. Further, parental guidance is crucial for adolescents who need guidance as they work through their ego identity issues (Chhabra & Sodhi, 2012).

Adolescents growing up in disrupted families face multiple challenges in addition to cognitive, physical, and social changes (Stallman & Ohan, 2016). Disruptions in the family system may be through divorce, separation, or death (Sigelman & Rider, 2015). Consequently, faced with multiple changes in their social environment, adolescents may experience the process of developing ego identity as overwhelming (Geldard & Geldard, 2010). Therefore, it may affect the development of ego identity negatively by hampering the processes of exploration and commitment to a given identity (Fomby & Sennott, 2013).

2.2.3.2 Parenting styles. According to Baumrind's theory (1971) of parenting styles, parental responsiveness is viewed as important during adolescence. Although adolescents are very much attached to their peers, it is argued that they value their relationship with their parents as a first environment of socialisation (Sigelman & Rider, 2015). Inevitably, the development of ego identity is influenced by the type of parenting style to which adolescents are exposed (Schachter & Ventura, 2008). In this respect, it has been documented that an authoritarian parenting style, which is associated with high demandingness-control, may result in long-term effects on the developing ego identity (Beyers & Goossens, 2008). For instance, the authoritarian parenting style is often characterised by rigidity and control. Consequently, it may result in rebellious reactions displayed by adolescents. In fact, the authoritarian parenting style limits one's opportunities to explore alternatives required for developing an ego identity (Koepke & Denissen, 2012). Other factors such as high anxiety, depression, and low academic achievements have also been linked to an authoritarian parenting style (Williams, Ciarrochi, & Heaven, 2012). Such factors might interfere with the exploration process critical for developing ego identity. Indeed, adolescents with authoritarian parents remain in foreclosed statuses, since they have limited opportunities to explore and to commit to a stable ego identity (Koepke & Denissen, 2012; Marcia, 1966).

In contrast, the authoritative parenting style, which is high in acceptance and low in demandingness-control, is associated positively with the forming of ego identity (Roman, 2011). Such traits allow adolescents to explore and to commit to particular values, beliefs and goals (Beyers & Goossens, 2008). Moreover, adolescents raised with an authoritative parenting style, get parental support. This encourages independence and autonomous behaviour, which is associated with the formation of ego identity (Beyers & Goossens, 2008).

A permissive parenting style is linked with high acceptance and low demandingness-control (Baumrind, 1971). Adolescents who lack guidance and monitoring become anxious, which hinders the forming of an ego identity (Chhabra & Sodhi, 2012; Sigelman &

Rider, 2009). This parenting style is associated mostly with low ego strength, poor academic performance, and reckless behaviour during adolescence (Dehyadegary, Yaacob, Juhari, & Talib, 2012; Sigelman & Rider, 2015).

In essence, parenting styles are a great determinant in developing ego identity. In summary, an authoritative parenting style coupled with guidance and support is very effective, as it encourages optimal forming of stable ego identities. While an authoritarian parenting style hinders the forming of ego identity, a permissive parenting style fails to give adolescents a solid structure for developing ego identity.

2.2.3.3 Social support. Erikson (1968) argues that developing ego identity involves an integration of intrinsic characteristics and environmental factors. Essentially, the interaction between individuals and their environment is important in the forming of ego identity. In fact, the interaction with their environment allows adolescents to explore different identities from varied contexts (Kroger, 2004). Indeed, social support from significant others influences the forming of ego identity, since it affects how individuals navigate choices and decisions related to ego identity (Bosch, Segrin, & Curran, 2012). Adolescents who receive less social support from family and friends face problems in developing ego identity (Gfellner & Córdoba, 2011). Consequently, adolescents end up isolating themselves and avoiding socialisation, which interferes with exploration and the forming of ego identity (Sica et al., 2016). To sum up, social support correlates with healthier social skills and is associated directly with the forming of ego identity in adolescents (Luyckx et al., 2007).

However, the active participation of adolescents in forming their ego identity is not accounted for by the discussed factors. Development of ego identity is affected not only by societal factors, but also by individual aspects (Erikson, 1968). Adolescents are motivated by inner dynamics and not only by the social cultural context of which they have little or no control (Brittian, 2012).

2.2.4 Gender differences in ego identity development. Research on gender differences conducted by Kroger (1997) and Waterman (1999) yielded no gender differences with regard to the overall forming of ego identity. Additionally, other researchers confirm no general differences in the development of ego identity (Meeus, Iedema, Helsen, & Vollebergh, 1999). This is explained by the considerable societal changes with regard to gender roles (Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010). Erikson (1968) believes that social and historical factors affect the forming of ego identity.

Some research supports the occurrence of gender moderation in the ego identity statuses of exploration and commitment. For example, Klimstra et al. (2010) found that early adolescent females seem to be more mature than males are in the process of forming ego identity, but males tend to catch up during late adolescence. Morsünbül, Crocetti, Cok, and Meeus (2016) confirm that males are more represented in the diffusion and moratorium statuses, whereas females are inclined to be classified in searching moratorium, achievement, and foreclosure statuses. Similarly, regarding different ego identity styles, females seem to be more advanced than males are in exploration, with males tending to attain the same level during later adolescence (Crocetti et al., 2012). Patterns of gender differences in identity dimensions were also confirmed by Meeus et al. (2010), who found that females reach a mature and achieved ego identity status earlier than males do. These findings can be explained by the fact that cognitive and physical maturity occurs earlier in females compared to males (Klimstra et al., 2010). This might also be because females exhibit higher levels of self-reflection in contrast to their male counterparts (Klimstra et al., 2010).

To sum up, the development of ego identity during adolescence is complex. On the one hand, patterns of gender differences were established, and on the other hand, no gender differences were found (Seabi, 2012). The inconsistent picture requires further research on gender differences with regard to developing ego identity in adolescents.

2.3 Self-esteem

The focus in this section is on defining and conceptualising the construct *self-esteem*. A theoretical explanation of the formation of self-esteem during adolescence is discussed. In addition, factors related to forming self-esteem during adolescence are investigated, followed by gender differences in forming self-esteem.

2.3.1 Defining self-esteem and its components. According to Rosenberg (1965), self-esteem is defined as an appraisal of one's self-worth or abilities. Generally, it is regarded as an evaluation of oneself with regard to self-appreciation or disapproval (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Moreover, self-esteem is described as a fairly enduring trait across individuals' lifespan (Orth, 2017). The construct of self-esteem can range from low to high (Rosenberg, 1965). In addition, Orth, Robins, Widaman, and Conger (2014) classify the construct as either global – that is, people's general perception of their worth – or domain specific, implying, for example, the evaluation of one's competences, skills, or physical attractiveness.

2.3.2 Development of self-esteem during adolescence. Adolescence is an important phase for developing self-esteem (Sigelman & Rider, 2015). Generally, adolescents become more knowledgeable and realistic about their strengths and weaknesses (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). In this respect, adolescents have opportunities to feel competent in many areas that they consider important to them; therefore, it increases their self-esteem (Harter, 2012).

A few researchers on self-esteem argue in favour of the increment of self-esteem from adolescence to middle adulthood (Orth, Maes, & Schmitt, 2015; Orth, Robins, & Widaman, 2012). This increment is associated with parental support and approval, academic achievement, and good peer relations (Orth, et al., 2012; Orth, et al., 2014). In effect, adolescents with a high self-esteem feel accepted, which increases their self-confidence (Aro & Nurmi, 2007). Moreover, it is speculated that a high self-esteem during adolescence is a stepping-stone in dealing successfully with major developmental challenges faced later in life (Aro & Nurmi, 2007).

It has been noted that self-esteem tends to decline during adolescence (Robins & Trzesniewski, 2005; Sigelman & Rider, 2015). This results from major physical, biological, and cognitive changes occurring in adolescents that are associated with a decline in self-esteem. For instance, some adolescents become unhappy with their body changes. Furthermore, factors such as changes in body image, and moving from concrete to abstract thinking drive adolescents to think critically about their goals, values, and roles (Robins & Trzesniewski, 2005). Moreover, during adolescence, adolescents are faced with multiple stressors, such as moving to high school, and coping with numerous pubertal changes. Because of such stressors, adolescents are likely to experience low self-esteem (Von Soest, Wichstrøm, & Kvaalem 2016).

2.3.3 Determinants of self-esteem development. Self-esteem is affected by multiple factors (Mandara & Murray, 2000). During adolescence, changes in self-esteem are determined by interpersonal, intrapersonal, and sociocultural factors (Von Soest et al., 2016). In an African context, factors such as quality of parenting, peer approval, and disrupted families are among other factors that determine individuals' self-evaluation, either positively or negatively, and affect their self-esteem (Okonkwo, 2013). Some of the factors relevant to this study are discussed next.

2.3.3.1 Socioeconomic status. Conger, Conger, and Martin (2010) and Edin and Kissane (2010) demonstrate that poverty affects not only the development of self-esteem but

also other developmental processes. Therefore, social-economic status is regarded as a key determinant of self-esteem directly influencing one's perception of self. During adolescence, socioeconomic status may contribute to emotional disturbance, relationships marked by conflict between parents and between parents and their children. Such conflicts may contribute to the general poor development of self-esteem (Conger & Donnellan, 2007; Edin & Kissane, 2010).

Consistent with these findings, studies on adolescents suggest that poverty indirectly account for low self-esteem (Orth et al., 2015; Orth, Trzesniewski, & Robins, 2010). Income may shape individuals' self-esteem; thus, it accounts for small but significant differences (Erol & Orth, 2011; McMullin & Cairney, 2004; Twenge & Campbell, 2002). Therefore, socioeconomic status may account for bigger differences in adulthood and old age and very little during adolescence (Orth, 2017).

2.3.3.2 Quality of parenting. Securely attached children develop a positive internal working model and value themselves and others (Bowlby, 1969; Orth, 2017). Secure attachment results from responsive, caring parenting, giving security to the developing child, and influencing his or her self-esteem during adolescence (Bowlby, 1969; Yousaf, 2015). There is empirical evidence that parenting style affects individuals' self-esteem (Brummelman et al., 2015; Milvsky, Schechter, & Netter, 2007). Consequently, low self-esteem has been associated with an authoritarian way of parenting, whereas an authoritative parenting style predicted high self-esteem in adolescents (Heaven & Ciarrochi, 2008).

In addition, Leary (2012) explains how parental attitude towards their children shapes individuals' self-esteem. Expounding on that, Milvsky et al. (2007) suggest that self-esteem is a psychological aspect that facilitates social interaction. Therefore, experiencing social acceptance not only contributes to the development of self-esteem but also determines whether one will have high or low self-esteem (Leary, 2012).

2.3.3.3 Disrupted families. According to Rosenberg (1965), the forming of self-esteem is hindered when adolescents are raised in disrupted families. Therefore, generally, family break-up that results from parental conflicts generates problems regarding self-esteem. Hence, parental divorce or separation is more likely to result in the development of low self-esteem in adolescents (Siffert, Schwarz, & Stutz, 2012).

Thus, relationships marked by conflict between parents tend to lower the parental responsiveness, which in turn affects individuals' self-esteem. Disruption in families may be

due to absent fathers. Luo, Wang, and Gao (2012) postulate that the presence of a father correlates with high self-esteem in adolescents. Indeed, growing up in intact families contributes positively to individuals' self-esteem (Siffert et al., 2012).

2.3.3.4 Peer acceptance. Leary and Baumeister (2000) argue that the development of self-esteem is influenced greatly by the degree of acceptance or rejection by significant others. In addition, given their capacity to think abstractly, adolescents are likely to engage in evaluating social roles (Erol & Orth, 2013; Orth et al., 2012). Because of social transition, adolescents tend to value peer approval. Social transition involves a change in social networks, greatly influenced by school transitions (La Greca & Ranta, 2015). In fact, owing to increased independence from their parents, adolescents tend to detach from parental approval to rely mostly on the support of friends of the same age (Erikson, 1968; Valkenburg, Peter, & Schouten, 2006).

In addition, according to socio-metric studies, adolescents with high self-esteem are likely to be esteemed more highly by peers than those with low self-esteem are. In support of this opinion, Boudreault-Bouchard et al. (2013) confirm the direct link between individuals' self-appraisal and worth, implying that individuals' self-opinion is determined largely by what others think of them. Gruenenfelder-Steiger, Harris, and Fend (2016) affirm that peer relationships are important in determining the development of self-esteem during adolescence. In addition, the feeling of peer acceptance and social integration of adolescents contribute to shaping adolescents' competencies and facilitate later decision-making processes (Allemand, Steiger, & Fend, 2015).

2.3.4 Gender differences in developing self-esteem. Males and females tend to follow similar paths in developing self-esteem. It increases from childhood, lowers during adolescence, and improves in adulthood, but declines once more during old age (Robins & Trzesniewski, 2005). In fact, self-esteem tends to increase from late adolescence to middle adulthood for both males and females (Bleidorn et al., 2016; Erol & Orth, 2011; Helwig & Ruprecht, 2017).

Nonetheless, researchers found that, during early adolescence, males report higher self-esteem than females did (Helwig & Ruprecht, 2017). Gender differences in self-esteem have also been observed in other studies (Orth et al., 2015; Orth et al., 2010; Orth & Robins, 2014; Robins et al., 2002; Robins & Trzesniewski, 2005). In a meta-analysis of gender differences, females reported lower self-esteem than males did (Helwig & Ruprecht, 2017). Moreover, several researchers demonstrated a small gender gap in self-esteem (McMullin & Cairney,

2004; Robins et al., 2002). In fact, Bleidorn et al. (2016) support these findings and confirm significant gender differences in various social cultural contexts.

This gender gap could be explained by the fact that boys and girls are treated differently at school. In addition to differential treatment, the onset of puberty also affects the perception of one's body image (Bleidorn et al., 2016). Moreover, self-esteem in females is associated with physical appearance. Therefore, unrealistic models portrayed by the media may affect females' self-esteem negatively, whereas males are expected socially to be tough (Helwig & Ruprecht, 2017).

Research carried out by Orth et al. (2012, 2015) did not find a significant gender gap. Similarly, in prior longitudinal studies, non-significant gender differences in self-esteem were established (Erol & Orth, 2011; Orth et al., 2012). In addition, Orth et al. (2014) established that self-esteem is not affected by gender. In addition, gender had no influence on the development of self-esteem in cohort studies. This implies that self-esteem is stable across gender and generations (Orth et al., 2012).

Although research on self-esteem has been documented extensively, not much is known about self-esteem in cultures other than the Western cultures (Bleidorn et al., 2016). Consequently, owing to differences in social norms and historical backgrounds, there is a need to undertake a systematic exploration of self-esteem and gender differences in an African cultural context (Bleidorn et al., 2016; Chao, Vidacovich, & Green, 2017).

2.4 The Relationship between Career Aspiration, Ego Identity, and Self-esteem

Close links between career aspiration, ego identity, and self-esteem have been acknowledged (Simpkins et al., 2015; Tsang et al., 2012). In prior studies, the relationship between career aspiration, ego identity, and self-esteem has been confirmed (Erikson, 1968; Holland, 1997; Im, 2010; Sung et al., 2016). The basis of the relationship between the constructs lies in the fact that adolescents' self-perception can influence the development of ego identity and the decision process that takes place when making career-related choices (Tsang et al., 2012).

According to Malanchuk et al. (2010), individuals who have achieved ego identity experience less stress in making career choices. Similarly, Stead and Watson (2015) support the notion that the development of a deeper self-understanding in adolescents is crucial in determining one's career aspirations. Marcia (1966) argues that adolescents follow a particular trajectory in developing ego identity, which may result in a crisis when faced with

societal demands to make career choices. Such a crisis is often provoked by thoughtful exploration, questioning, and commitment (Berman, You, Schwartz, Teo, & Mochizuki, 2011). Furthermore, Beyers and Luyckx (2016) found that the ongoing reflection on alternatives during ruminative exploration results in unsatisfactory career aspirations. Thus, the examination of ego identity in relation to future career may promote exploration of ego identity and commitment to a particular career (Vijaykumar & Lavanya, 2015). In this respect, ego identity has a significant influence in the career-development process and decision making during adolescence. Adolescence is considered a critical period in which adolescents weigh different career options as a way of establishing their ego identity (Gupta et al., 2014). Moreover, the development of ego identity is interrelated with various aspects of adolescents' lives. Thus, development of ego identity greatly influences the development of clear and stable goals with regard to aspired careers (Metz et al., 2009).

Adolescents with achieved ego identity status seem to be more aware of their strengths and flaws; factors that strengthen their self-esteem (Brittian, 2012; Luyckx et al., 2013). Moreover, it is hypothesised that high self-esteem during adolescence enables adolescents to explore different options successfully; thus, to establish an achieved ego identity (Gupta et al., 2014). However, low self-esteem has been associated with adolescents in diffused ego status and foreclosed ego status (Beyers & Luyckx, 2016; Cramer, 2016; Luyckx et al., 2013). Moreover, according to Erikson (1968), there is some evidence that a weak self-esteem is linked to ego identity confusion.

Proponents of the learning and expectancy theory posit that self-evaluation foretells educational choices, outcomes, and aspirations (Fang, 2016). Moreover, high self-esteem serves as a drive for adolescents to reach their goals, whereas low self-esteem may affect adolescents' career aspirations negatively (Fang, 2016). Adolescents with high self-esteem tend to have better career and financial prospects than adolescents with low self-esteem have (Trzesniewski et al., 2006). On the contrary, research on ruminative exploration found a close relationship between career aspiration and fluctuating self-esteem (Brittian, 2012; Luyckx et al., 2013).

Regarding the determinants of career aspiration, it was found in past studies that self-esteem has a significant effect on the relationship between ego identity and career aspiration (Simpkins et al., 2015; Tsang et al., 2012). In other research, the pivotal role of self-esteem in individuals' career aspiration was established (Fang, 2016). Nevertheless, little is known

about the mediating or the moderating role of self-esteem in the relationship between ego identity and career aspiration (Maree, 2010; Salmela-Aro & Nurmi, 2007).

2.5 Chapter Summary

In this chapter, the terms *career aspiration*, *ego identity*, and *self-esteem* were defined. A discussion of the development of career aspiration, ego identity, and self-esteem during adolescence was provided. The different factors determining the development of career aspiration, ego identity, and self-esteem during adolescence were highlighted. Finally, gender-related aspects of the development of career aspiration, ego identity, and self-esteem during adolescence were investigated.

Chapter 3 – Research Methodology

In this chapter, the focus is on the following: First, the research aim and questions of the study are provided. Next, the research design and approach that informed the study are explained. Thereafter, the sampling procedures, data-collection methods, and data analyses are described. Last, the ethical considerations applicable to this study are discussed, and a chapter summary is provided.

3.1 Research Aim and Questions

In the literature review, the relevance of the study in a South African context, and in particular with adolescence, was discussed in detail. It is evident that, together with contextual factors, intrinsic factors such as ego identity, self-esteem, and gender have a bearing on the career decision-making process during the transitional phase of adolescence. Based on this understanding, the aim of this study is to explore the role of self-esteem in the relationship between ego identity and career aspiration in male and female adolescents.

The possible moderating role of gender in the relationship between ego identity and career aspiration in male and female adolescents was investigated prior to exploring the relationship between ego identity and career aspiration. It was also hypothesised that gender would have a moderating effect on the relationship between ego identity and career aspiration. If gender yielded significant results as a moderator variable, analyses would be made for males and females separately.

The following research questions were investigated:

1. Does a significant relationship exist between ego identity, career aspiration, and self-esteem in adolescents?
2. Does self-esteem moderate or mediate the relationship between ego identity and career aspiration in adolescents?

With regard to Question 1, it was hypothesised that there would be a significant positive correlation between ego identity, career aspiration, and self-esteem.

With regard to Question 2, it was hypothesised that self-esteem would have either a significant moderating or mediating effect on the relationship between ego identity and career aspiration.

3.2 Research Design and Approach

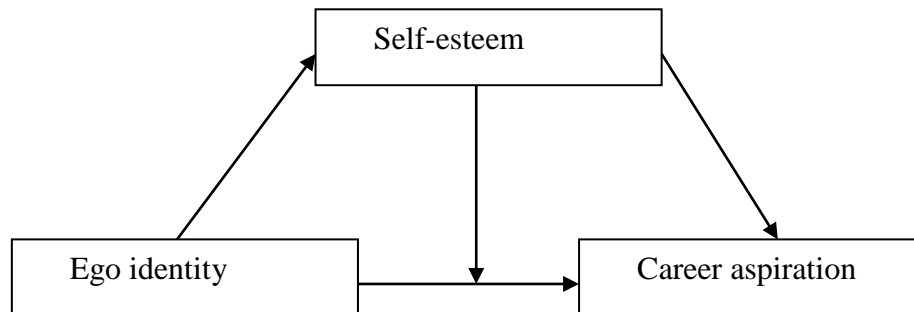
The current study is quantitative in nature. The type of research was non-experimental, employing a correlational design (Maree, 2011). The advantage of a quantitative approach is that it is a systematic and objective process in which numerical data from a selected sample are used to answer questions regarding the relationships among the studied variables (Neuman, 2014). Additionally, the quantitative approach allows a systematic enquiry into the relationship of measured variables (Howell, 2014). Furthermore, this type of approach enables the researcher to test the hypothesis of the study and allows for generalisability of results, depending on the characteristics of the sample (Neuman, 2014; Taylor & White, 2015). However, the quantitative approach is limited, as it does not allow contextual understanding of participants and the reasons for certain findings (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Chinyamurindi, 2012; Taylor & White, 2015). The use of a quantitative approach was warranted, since the aim of the study was to establish the relationship between ego identity and career aspiration and the role of self-esteem and gender in this relationship.

Non-experimental types of research are mostly observational in nature, with no manipulation of variables. No experimental or control groups are used, and constructs are observed as they naturally occur (Stangor, 2015). This study was non-experimental, since no intervention was made and the variables *ego identity*, *career aspiration*, and *self-esteem* were observed and measured as they exist in this specific sample.

A correlational design enables the researcher to identify and describe the relationship between variables and to establish the predictive nature of the variables under study. Moreover, this type of research design allows the researcher to establish the existence of a relationship and gives a description of the strength and direction of the relationship (Howell, 2014; Stangor, 2015). In this study, a correlational design was used to investigate the relationships between ego identity, career aspiration, and self-esteem.

Finally, the researcher aimed at gathering information to explore and describe the constructs under study in a South African context better. In this connection, the researcher made use of exploratory and descriptive research as means of attaining deeper knowledge about the studied constructs (Neuman, 2014; Stangor, 2015). To investigate the second research question, the researcher particularly wanted to investigate the role of a third variable in the relationship between two other variables. Mediation analysis allows the researcher to explore by what means a third variable exerts its effect on the predictor variable and the outcome. On the other hand, moderation occurs when the strength of the relationship between

two variables is dependent on a third variable (Preacher, Rucker, & Hayes, 2007). In this case, the researcher tried to explain how the phenomenon operates by identifying the “causal” factor that produces change in it. According to Johnson (2001), the term explanatory non experimental research may be used.



Graphical representation of the mediating and moderating variables: Figure 1

3.3 Research Participants and Sampling Procedures

Black adolescents from a secondary school located in the Mangaung area of the Free State Province in central South Africa participated in the research. Of the total population of the Mangaung municipality, 83.3% are black South Africans (Statistics South Africa, 2012). Research asserts that this particular ethnic group is under researched (Maree, 2010), particularly in the South African context (Schreuder & Coetzee, 2012). Males and females between 14 and 17 were included, since this is the period when adolescents tend to prioritise developmental tasks such as forming ego identity, making important life decisions such as deciding on future careers, and developing self-esteem (Erikson, 1968; Beal & Crockett, 2010; Cheung et al., 2013; Gottfredson, 2002; Hirschi, 2010b).

A non-probability convenience sampling technique was used to collect data. According to Maree (2011), in non-probability convenience sampling, the researcher makes use of participants that are within the researcher’s reach and that are readily available. The advantage of this method is that it is less expensive and quick; however, it does not result in representative samples (Stangor, 2015).

The final sample, after excluding incomplete surveys and outliers, comprised 336 participants. The demographic characteristics of the sample are summarised in Table1.

Table 1

Distribution of the Sample with regard to Gender, Age, Grade, and Language

		Frequency	%
Gender	Male	148	44.0
	Female	188	56.0
Age	14	189	56.3
	15	83	24.7
	16	42	12.5
	17	22	6.5
Grade	8	178	53.0
	9	99	29.5
	10	28	8.3
	11	21	6.3
	12	10	3.0
Language	Sesotho	138	41.1
	Setswana	158	47.0
	isiXhosa	31	9.2
	isiZulu	2	0.6
	Other	7	2.1

Gender groups were represented relatively equally, with 56% of the participants being female, and 44% male. The participants' ages varied from 14 to 17, with the majority of the sample being 14 years (56.3%) and 15 years (24.7%). Most of the participants were from Grade 8 (53.0%) and Grade 9 (29.5%). With regard to language, the Setswana ethnic group dominated with 47.0%, followed by the Sesotho ethnic group (41.1%).

3.4 Procedures of Data Collection

Data were collected by means of a biographic questionnaire (see Appendix A), and three standardised self-report measures: The *Vocational Identity Measure (VIM)*, the *Identity Process Questionnaire (EIPQ)* and the *Rosenberg Self-esteem Scale (RSES)*.

Fixed-format questionnaires are standardised and structured, with a fixed set of responses (Stangor, 2015). In self-report measures, participants respond to these set items, drawing on their own perceptions. This method is efficient for use in large samples, as it saves time and costs (Barker, Pistrang, & Elliott, 2016). However, there is risk for social desirability and acquiescent responding, which make the data collected less reliable (Stangor, 2015). Therefore, as a means of countering these limitations, the researcher emphasised the anonymous nature of the questionnaires and the importance of honesty. The use of reverse-stated items reduced the effects of acquiescent responding.

Data were collected during class time. The researcher visited various classes to administer the questionnaires. The learners were briefed about the research study, and willing participants gave their assent by completing the informed consent form (see Appendix B). Next, willing participants completed demographic information, followed by the three questionnaires. Data collection was completed in 5 sessions, each lasting between 45 to 60 minutes per class. During each of the five sessions 65 to 80 learners were assessed. The researcher was assisted by 2 colleagues to administer the surveys and to supervise the learners.

3.4.1 Biographic questionnaire. Details regarding participants' age, biological gender, ethnicity, choice of career, and parents' levels of education were obtained from answers to the biographic questions. The biographic questionnaire included questions such as “*What is your home language?*”, “*What career do you have in mind?*”, “*What is your mother's highest level of education?*” and “*What is your father's highest level of education?*”

3.4.2 Vocational Identity Measure (VIM). The *Vocational Identity Measure (VIM)* of Gupta et al. (2014) was used to measure career aspiration. The *VIM* was developed to measure the degree to which people are aware of their career aspirations, and predicts decisiveness or indecisiveness of adolescents with regard to their career choices (Gupta et al., 2014).

The *VIM* consists of 20 items, ranging on a 5-point Likert scale from *strongly disagree (1)* to *strongly agree (5)*. Some items are reverse coded. The 20 items combined provides one composite *VIM* score, with a score range between 20 and 100, whereby a strong career aspiration is indicated by higher scores (Gupta, Chong, & Leong, 2015). Research conducted on students from mid-Western high schools confirmed the validity and reliability of the *VIM* with a Cronbach alpha coefficient of .96 (Gupta et al., 2014).

In the current study, the Cronbach alpha coefficient was .86, which, according to Foxcroft and Roodt (2013), is acceptable when dealing with interest questionnaires. This Cronbach alpha coefficient indicates a strong internal consistency in the application of the *VIM* in this study.

3.4.3 The Ego Identity Process Questionnaire (EIPQ). Ego identity formation was assessed by means of the *Ego Identity Process Questionnaire (EIPQ)*, a self-report measure designed by Balistreri et al. (1995b). With this scale, 6-point Likert scale items, with a response format ranging from *strongly disagree (1)* to *strongly agree (6)*, are used to assess identity dimensions of exploration and commitment. The *EIPQ* is a 32-item instrument

containing negatively stated items that are reverse scored. High scores on subscales indicate greater exploration and commitment (Engler & Wiemann, 2010), whereas the sum of all the scores for exploration and commitment indicate the level of ego identity achievement (Balistreri, et al., 1995a). In a study on French college students, Cronbach alpha coefficients of .76 for exploration and .75 for commitment were established.

In this study, the reliability of the *EIPQ* was initially very low. Therefore, an item analysis was carried out and items that were inconsistent were deleted. After the deletion of inconsistent items, the final scale used in this study consisted of 18 items, with a score range between 18 and 108 and with a Cronbach alpha coefficient of .65. This reliability is considered acceptable (Foxcroft & Roodt, 2013).

3.4.4 Rosenberg Self-Esteem Scale (RSES). To assess the global evaluation of individuals' perception of their self-esteem, the *Rosenberg Self-esteem Scale (RSES)* (Rosenberg, 1965) was used. The *RSES* is comprised of 10 items, with five negatively and five positively worded statements, measured on a 4-point Likert scale, ranging from strongly *disagree* (1) to *strongly agree* (4). The score range is 10 to 40. Higher scores correspond to high levels of self-esteem (Rosenberg, 1965). In a sample of black South African secondary school learners, a Cronbach alpha ranging between .78 and .92 was observed. A test-retest reliability of .65 was also found (Idemudia, 2013; Westaway & Wolmarans, 1992).

In the current study, the Cronbach alpha coefficient was .60, which, according to Foxcroft and Roodt (2013) is acceptable when dealing with interest questionnaires. The Cronbach alpha coefficient indicates fairly good internal consistency.

3.5 Data Analysis

Participants' answers were captured on an excel spreadsheet and drawn into the Statistical Package for the Social Sciences (SPSS) for analyses. Three steps were followed to clean the data. First, participants outside the age range, outliers, and questionnaires with a response rate less than 90% were excluded. Second, based on the principle of the median, maximum probability statistics were used to fill in the missing values. Last, all the reverse-coded items were reverse-scored.

Since the *VIM*, *EIPQ*, and *RSES* have been used mostly in Western and American cultures, it was necessary to determine the reliability of the scales in the context of the current study. The Cronbach alpha coefficient was used to determine the internal reliability of the measured constructs. The Cronbach alpha coefficient is a measure used to verify the internal

consistency of a scale (Foxcroft & Roodt, 2013). According to several researchers, a Cronbach alpha ranging between .60 and .80 is considered acceptable (Foxcroft & Roodt, 2013, Goforth, 2015; Loewenthal & Lewis, 2015; Multon & Coleman, 2010). Factors such as test length, population group, and the purpose of the scale should be considered when interpreting the reliability of the measure (Cronbach, 1951; Tavakol & Dennick, 2011).

In addition, basic descriptive statistics were computed to describe central tendencies (in the form of means and standard deviations) of the sample in terms of the different variables. A frequency distribution of the demographic aspects of the sample (such as, gender, age, and grade) was completed. In addition, frequency distributions of categorical data summarised participants' envisaged careers, as well as their fathers' and mothers' levels of education.

Following this, the Pearson's product-moment correlation coefficient (r) (Howell, 2014) was computed to investigate the strength and direction of the relationship between career aspiration, ego identity, and self-esteem.

This was followed by various regression analyses (Howell, 2014). The advantage of regression analysis is that it allows considering how various predictors relate to a criterion variable (Stangor, 2015). First, to investigate the moderating role of gender, a moderated hierarchical regression analysis was made. If a gender effect were observed, a follow-up regression analysis would be run separately for male and female groups. Second, a moderated hierarchical regression analysis was used to determine the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration. If a significant relationship between ego identity and career aspiration were found, both the mediating and moderating role of self-esteem would be investigated. If a significant relationship between ego identity and career aspiration was not found, only the moderating role of self-esteem would be investigated.

3.6 Ethical Considerations

Ethical clearance was obtained from the Research Ethics Committee of the Faculty of the Humanities of the University of the Free State (see Appendix C), the Free State Department of Education (see Appendix D). This study formed part of a larger study called "Living and learning in central South Africa". The supervisor of this study is also the principal investigator of the larger study. A letter of approval was also obtained from the school principal (see Appendix E).

As proposed by Allan (2016), the participants who met the criteria for inclusion provided written assent. This guaranteed the voluntary nature of participation. The participants' ages varied from 14 to 17, given their legal incapacity to give informed consent, appropriate permission was obtained from the school principal who consented on their behalf. An informed consent form is an important written document that allows the researcher to commence with the data-collection process. However, before participants can sign the informed consent form, necessary information regarding the aim and rationale of the study, potential risks, and benefits, should be provided (Wassenaar, 2010). The researcher carefully explained to all the participants the aim, the rationale, potential risks, and benefits that might be involved in this study. This was followed by instructions on how to complete the questionnaires.

Allan (2016) states that participation is expected to be voluntary in nature. As a result, participants should not be coerced in any way but should willingly take part in the research. In this study, the learners participated voluntarily and were allowed to withdraw from the study at any point without any consequences.

Participants' lives should not be jeopardised in any way by their involvement in any study (Wassenaar, 2010). Throughout the study, measures were taken to ensure that the participants were protected from any harm. There were no potential physical risks with regard to this study; however, debriefing sessions were made available for the participants, if needed.

The researcher should maintain confidentiality (Allan, 2016). Confidentiality was maintained by protecting participants' identities, and by storing the obtained information securely in locked cupboards whereas, the electronic data was coded.

3.7 Chapter Summary

In this chapter, the methods and procedures used in this study were presented. The research approach and design were described in detail, followed by an explanation of the research participants, sampling procedures, data-collection procedures, and data-analyses procedures. Finally, the ethical considerations relevant to this research study were explicated.

Chapter 4 – Results and Discussion

In the first section of the chapter, the results are presented by focussing on descriptive statistics and inferential statistics. In the second section of the chapter, the results are discussed in relation to pertinent literature and prior research in the field of study. Descriptive aspects of the sample, the moderating role of gender, the relationship between ego identity and career aspiration, as well as the moderating or the mediating role of self-esteem are discussed. This chapter is concluded with a brief summary of the key findings.

4.1 Results

The results are presented as they relate to descriptive and inferential statistics. First, descriptive statistics in the form of frequency distributions regarding the categorical data are presented, followed by the results pertaining to the central tendencies, dispersion, and distribution of the continuous variables investigated in this study. Next, the results pertaining to the moderating role of gender are presented, followed by the relationships between career aspiration, ego identity, and self-esteem. Last, results regarding the possible moderating or mediating role of self-esteem in the relationship between career aspiration and ego identity are presented.

4.1.1 Descriptive statistics. Frequency distributions for the categorical data were calculated. In Table 2, a summary of the participants' envisaged careers, as well as their parents' level of education, is presented.

Table 2

Distribution of the Sample with regard to Envisaged Career and Mother's and Father's Level of Education

		Frequency	%
Envisaged career	Business	37	11
	Sciences	48	14.3
	Medical Professions	99	29.5
	Sports and Entertainment	32	9.5
	Law	30	8.9
	Social Sciences	26	7.7
	Other	64	19
Mother's level of education	Don't know	98	29.2
	Grade 1-11	27	8.0
	Grade 12 completed	155	46.1
	Higher education	56	16.7
Father's level of education	Don't know	119	35.4
	Grade 1-11	17	5.1
	Grade 12	129	38.4
	Higher education	71	21.1

Most of the participants (29.5%) are interested in pursuing future careers in the medical professions. A large number of the participants envisage careers in business (11%) and sciences (14.3%).

The majority of the sample's mothers and fathers had completed a Grade 12 level of education, represented by 46.1% and 38.4% respectively. However, 29.2% of the sample did not know their mothers' education level, and 35.4% of the sample did not know their fathers' educational level.

Information regarding the means, the standard deviations, and the score ranges obtained on the measures of ego identity, career aspiration, and self-esteem is provided in Table 3.

Table 3

Minimum and Maximum Scores, Means and Standard Deviations for Ego Identity, Career Aspiration, and Self-esteem

	Min	Max	Mean	SD	Skewness		Kurtosis	
					Statistic	SD	Statistic	SD
Ego Identity (Scale range 18-108)	37	102	76.2753	10.39924	-.255	.133	.687	.265
Career aspiration (Scale range 20-100)	38	100	82.16	10.739	-.713	.133	.677	.265
Self-esteem (Scale range 10-40)	20	40	35.13	4.342	-.372	.133	.331	.265

Table 3 can be summarised as follows: For ego identity, the *EIPQ* ranges from 18 to 108, whereas participants' scores ranged from 37 to 102. If a median score on the *EIPQ* of 63 is considered, the sample mean score of 76.275 is approximately one standard deviation above the mean.

With regard to career aspiration, the *VIM* ranges from 20 to 100, and the scores of the participants ranged from 38 to 100. If the median score on the *VIM* of 60 is considered, the sample mean of 82.16 is above the mean by approximately two standard deviations.

The self-esteem scale has a possible score ranging from 10 to 40. The participants' scores ranged from 20 to 40, with a mean of 35.13. If the median score on the *RSES* of 25 is considered, the sample mean of 35.13 is approximately two standard deviations above the mean.

4.1.2 Inferential statistics. Inferential statistics are used to answer research questions and to generalise results from the sample to the population (Howell, 2014). The results pertaining to the moderating role of gender in the relationship between ego identity and career aspiration, the correlations between ego identity, career aspiration, and self-esteem, as well as the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration are presented in this section.

4.1.2.1 Results related to the moderating role of gender. The possible role of gender as a moderator variable was investigated prior to investigating the role of self-esteem in the relationship between ego identity and career aspiration. The cross product of gender and ego identity did not yield any significant results with regard to the relationship with career

aspiration (R^2 change = .000; $F_{(1,336)} = .160$; $p = .690$). Since no statistically significant results were found for the moderating role of gender in the relationship between ego identity and career aspiration, all further analyses were made for the sample group as a whole (and not separately for the two gender groups).

4.1.2.2 Results related to the correlation between ego identity, career aspiration, and self-esteem. To investigate the relationship between ego identity, career aspiration, and self-esteem, a two-tailed bivariate correlation was calculated using Pearson's product moment correlation coefficients (r) (Howell, 2014). The aim was to answer the first research question: Is there a significant relationship between ego identity, career aspiration, and self-esteem in adolescents? Table 4 summarises the correlations.

Table 4

Correlations between Ego Identity, Career Aspiration, and Self-esteem

	Ego identity	Career aspiration	Self-esteem
Ego identity		.336**	.080
Career aspiration			.367**
Self-esteem			

** $p < .01$

According to Table 4, there were statistically significant correlations between career aspiration and ego identity ($r = .336$; $p < .01$), as well as between career aspiration and self-esteem ($r = .367$; $p < .01$) for the adolescent group. The correlation coefficient between ego identity and self-esteem was not significant ($r = .080$; $p = .143$).

To determine how much of the variance in career aspiration can be explained by each variable separately, hierarchical regression analysis was used. There was a statistically significant relationship between ego identity and career aspiration ($R^2 = .113$; $p < .01$), indicating that ego identity can explain 11.3% of variance in career aspiration (on its own). In addition to this, there was a statistically significant relationship between self-esteem and career aspiration ($R^2 = .135$; $p < .01$), indicating that self-esteem (on its own) accounts for 13.5% of the variance in career aspiration of adolescents.

4.1.2.3 Results related to the moderating/mediating role of self-esteem. The possible moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration was investigated using a moderated hierarchical multiple regression analysis, with standardised regression coefficients (β) for each predictor on each step of the regression

to indicate the unique contribution of each predictor. Mediation would occur if the strength of the relationship between the predictor (ego identity) and the outcome (career aspiration) is reduced significantly (the direct significant effect becomes non-significant) by including the third variable (self-esteem). Moderation indicates the combined effect of two variables on an outcome. Moderation occurs if the interaction effect is significant (Preacher, Rucker, & Hayes, 2007). The results are reported in Table 5 below.

Table 5

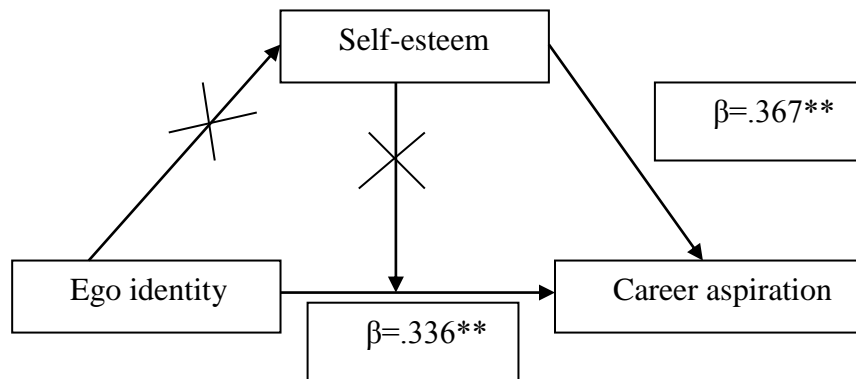
Moderated Hierarchical Regression Analysis with Career Aspiration as Dependent Variable, Ego Identity as Independent Variable, and Self-Esteem as Intervening Variable

Model	Unstandardised Coefficients		Standardised Coefficients	<i>p</i>	<i>t</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	β	Std. Error	β						
1 (Constant)	-6.613	.051		1.000	.000	42.370	.336	.113	.110
Ego Identity	.336	.052	.336	.000	6.509				
2 (Constant)	-6.415	.048		1.000	.000	49.472	.479	.229	.224
Ego Identity	.308	.048	.308	.000	6.382				
Self-esteem	.342	.048	.342	.000	7.093				
3 (Constant)	-.004	.048		.928	-.090	33.499	.482	.232	.225
Ego Identity	.307	.048	.307	.000	6.358				
Self-esteem	.344	.048	.344	.000	7.123				
Ego IdentityX Self-esteem	.054	.045	.057	.233	1.195				

From Table 5 it can be deduced that the variables ego identity and self-esteem yielded statistically significant results at the 1% level. With regard to the mediating effect, statistically significant results were found when self-esteem and ego identity were combined ($\beta = .342$; $p < .01$); ($\beta = .308$; $p < .01$). Conversely, this implies that each variable affects career aspiration separately. Hence, self-esteem does not act as a mediator in this model. Considering the moderating role of self-esteem, the product between self-esteem and ego identity did not yield statistically significant results ($\beta = .057$; $p = .233$).

The results indicate that no statistically significant results were found with regard to the mediating or moderating effect of self-esteem in the relationship between ego identity and

career aspiration. Hence, it is clear that ego identity and self-esteem have a direct effect on career aspiration, irrespective of each other.



Graphical representation of the results: Figure 2

4.2 Discussion of the Results

In this section, results presented in the previous section are discussed. First, descriptive tendencies are presented, followed by a discussion of the moderating role of gender in the relationship between ego identity and career aspiration. Results regarding the research questions are discussed in relation to prior research findings in the field. Last, a summary of the key points is presented.

4.2.1 Descriptive statistic tendencies. With regard to the demographic characteristics of the sample, some tendencies were observed in the distribution of the sample regarding envisaged career. Most of the participants are interested in medical professions (29.5%) and sciences (14.3%). This could be explained by the lack of an understanding of self, of career interests, abilities, and goals (Stead & Watson, 2015). In previous research studies, it was noted that adolescents' self-knowledge and that of the world of work also affect the process of career choices (Stead & Watson, 2015; Super, 1980). Many South African adolescents are faced with major career choices problems. They either possess few or no alternatives, lack the motivation to choose, or are constrained to choose careers (Nicholas, Naidoo, & Pretorius, 2006). In addition, some adolescents still think concretely about the world of work; consequently, they are most likely to aspire to careers because of high salaries or for prestige reasons (Lupart et al., 2004). The sample of this study included adolescents from a poor township in the Mangaung area. There is evidence that financial constraints, educational opportunities, and general socio-economic conditions may exert pressure and consequently affect the optimal ability to make career choices (Migunde et al., 2011).

With regard to father and mother's level of education, the majority of the participants' parents had a Grade 12 level of education (46.2% and 38.4%); therefore, it can be hypothesised that participants in this study might have been influenced by parental expectations (Pinquart & Pfeiffer, 2013). In previous research, it was found that parents were the main socialising agents who shaped and modelled the beliefs and goals of their children (Cheung et al., 2013). In addition, the development of career aspirations can be influenced by the culture in which people grow up and the family in which they are born (Savickas & Lara, 2016).

Other descriptive statistics relate to career aspiration, ego identity, and self-esteem levels of the sample in this study. With regard to career aspiration, the mean score of the sample was 82.16, which is an indication that the participants in the study have relatively clear ideas about the type of careers they would pursue. This is in contrast with previous studies in which it was argued that adolescents in their early adolescence were still searching for different options and had not yet decided on particular career interests (Beal & Crockett, 2010). In fact, during early adolescence, adolescents have a vague idea about the occupational environment (Holland, 1985; Metz et al., 2009; Super, 1980). Moreover, according to Gottfredson (2002), adolescents fall in the exploration stage of the realistic period. Therefore, adolescents may find it difficult to choose desired careers (Gottfredson, 2002; Hirschi, 2010b). However, the applicability of stage theories on career choice in a South African context is questionable (Chinyamurindi, 2012).

The median score on the *EIPQ* is 63, and the participants in this study had a mean score of 76.28, which is one standard deviation above the mean. These results are consistent with South African studies by Low, Akande, and Hill, (2005) and Thom and Coetzee, (2012) that report elevated rates of achieved ego identity.

Participants in this study had self-esteem levels that were slightly above average with a mean of 35.13, indicating fairly high self-esteem. This result correlates with findings in favour of the increment of self-esteem from adolescence to middle adulthood (Orth et al., 2015; Orth et al., 2012). However, according to studies by Orth et al. (2015), adolescents tend to experience a drop in self-esteem in early adolescence.

4.2.2 Gender as a moderator variable. This study did not reveal statistically significant results for the moderating role of gender in the relationship between ego identity and career aspiration. These findings differ from those of previous studies that indicate that gender plays

a role in the development of career aspiration, ego identity, and self-esteem (Bleidorn et al., 2016; Helwig & Ruprecht, 2017; Morsünbül et al., 2016; Sigelman & Rider, 2015; Stead & Watson, 2015; Tsang et al., 2012). Furthermore, in previous research, it was noted that gender influences the type of careers aspired to, since individuals tend to value different aspects of work (Meeus et al., 2010).

The results observed in the sample of this study can be explained by the fact that women have made immense progress towards equality with men with regard to career aspirations (Lupart et al., 2004; Rudman & Phelan, 2010). For example, it has been noted that males and females have a tendency to aspire to similar careers (Migunde et al., 2011). Crawford (2012) found no gender moderation with regard to career interests. In other African countries, no gender effect was observed with regard to career orientation (Chemeli, 2013). This implies that other aspects such as ego identity development and self-esteem, rather than gender, play an important role in terms of careers pursued by adolescents (Seabi, 2012).

4.2.3 The relationship between ego identity, career aspiration, and self-esteem. The first research question posed in this study was the following: Does a significant relationship exist between ego identity, career aspiration, and self-esteem in adolescents? In this study, it was found that ego identity correlates positively with career aspiration. For the sample of this study, ego identity could explain 11.3% of the variance in career aspiration. This is consistent with findings by Malanchuk et al. (2010), who state that individuals who have achieved ego identity are likely to experience less stress in making their career choices. Similarly, the forming of ego identity by active questioning of one's goals and interests allows adolescents to assess different career alternatives (Migunde, Othuon, & Mbagaya, 2015; Vijaykumar & Lavanya, 2015). Consequently, through the processes of ego identity formation, adolescents develop a healthy ego identity that determines their decision-making and career choices (Im, 2010; Sung et al., 2016). In sum, ego identity development is associated strongly with the development of clear and stable goals and the overall vocational perception of individuals (Metz et al., 2009).

Also, as hypothesised, there was a statistically significant positive correlation between self-esteem and career aspiration. Self-esteem accounted for 13.5% of the variance in career aspiration. In agreement with Fang (2016), high self-esteem paves the way for adolescents to realise their goals, whereas low self-esteem influences career aspiration negatively. Therefore, the development of deeper self-understanding in adolescents is pivotal in determining their career aspirations (Stead & Watson, 2015). It is equally likely that the influence of self-

concept on competencies and careers may as well explain why young people would seek to make career choices consistent with their ego identity (Stead & Watson, 2015).

There was no significant correlation between ego identity and self-esteem, which means that adolescents can have a strong ego identity and know who they are, but still do not feel good about themselves. This is contrary to literature stating that people with stronger ego identity will also have stronger self-esteem (Tsang et al., 2012) and that adolescents with an achieved ego identity status tend to be more conscious of their strengths and weaknesses, resulting in stronger self-esteem (Beyers & Luyckx, 2016; Luyckx et al., 2013). In addition, it has been found that adolescents in the foreclosed ego status experience low self-esteem (Cramer, 2016). However, the ages of participants ranged between 14 and 17. Therefore, it can be hypothesised that adolescents' ego identity is still developing and does not affect their self-esteem directly. Moreover, cultural differences in interpreting achieved ego identity in relation to self-esteem might explain this finding (Cheng & Berman, 2012).

4.2.4 The moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration. The second research question of the study was as follows: Does self-esteem moderate or mediate the relationship between ego identity and career aspiration? With regard to the model on the moderating or mediating role of self-esteem in the relationship between ego identity and career aspiration, no statistically significant results were revealed. However, self-esteem made a unique significant contribution to career aspiration. The second research question is discussed in detail in this subsection.

4.2.4.1 Self-esteem as a moderator. The product between self-esteem and ego identity did not yield statistically significant results. Self-esteem did not bring any significant changes in the relationship between ego identity and career aspiration. It is apparent that ego identity and self-esteem have a direct effect on career aspiration, irrespective of each other. This finding differs from findings by Tsang et al. (2012), who posit that self-esteem influences ego identity formation, which in turn creates a platform for commitment to one's career aspirations.

4.2.4.2 Self-esteem as a mediator. When self-esteem was added to the regression equation, self-esteem did not mediate the relationship between ego identity and career aspiration in adolescents, as was hypothesised. Therefore, self-esteem does not act as a mediator in the relationship between ego identity and career aspiration. Each variable (ego identity and self-esteem) influences career aspiration separately. This finding is in contrast to

previous research that found that changes in self-esteem tend to influence ego identity development (Luyckx et al., 2013). This would imply that self-confident adolescents are likely to engage in the evaluation of commitments, leading to the forming of an integrated ego identity, which in turn plays a role in individuals' career aspiration. Therefore, self-esteem has been identified as a catalyst in the making and internalising of one's goals and choices (Duriez, Luyckx, Soenens, & Berzonsky, 2012; Luyckx et al., 2013; Vignoles, Regalia, Manzi, Gollidge, & Scabini, 2006). This was not confirmed in this study.

The absence of a significant mediator effect in this study can be explained by a number of factors. First, the age group of the sample in this study varied between 14 and 17. Considering the continued development of self-esteem during adolescence, it could mean that the self-esteem of adolescents in the current age range (14-17) is still developing and, thus, does not interact with ego identity to influence career aspiration. In addition to this, the observed mediating role of self-esteem is documented in research carried out in Western cultures (Bleidorn et al., 2016; Chao et al., 2017). The fact that the current study did not display similar results might be explained by differences in social norms and historical backgrounds.

4.2.4.3 Self-esteem as a main effect. According to the results of this study, self-esteem made a unique significant contribution to career aspiration. This result substantiates previous findings on self-esteem. According to Malanchuk et al. (2010), self-esteem influences career aspiration directly. Self-esteem improves adolescents' self-image. Consequently, high self-esteem serves as a drive for adolescents to realise their goals (Fang, 2016). Furthermore, Idemudia (2013) holds that high self-esteem not only improves adolescents' self-image, but also enhances their academic achievement. Therefore, it enables adolescents to choose aspired careers successfully. In addition, in previous research, it was noted that adolescents with high self-esteem tend to have better career prospects (Trzesniewski et al., 2006).

4.3 Chapter Summary

In this chapter, the results of the study were presented and discussed. The results were discussed under descriptive statistics and inferential statistics. The descriptive results included the distribution of the sample with regard to envisaged career and mother and father's level of education. Also, the minimum and maximum scores of the measured variables were presented. Considering the inferential statistics, results related to the moderating role of gender were presented. All analyses were done only with the total sample, given that gender did not have a moderating effect. A significant correlation was found between ego identity and career aspiration. Moreover, a significant relationship between self-esteem and career

aspiration was found. Self-esteem did not have a moderating or mediating effect. However, self-esteem had a significant main effect in the study. Finally, an integrated discussion was presented based on the research questions and in relation to prior research in the field and the literature review.

Chapter 5 – Limitations, Recommendations, and Conclusion

The focus of this chapter is on the key findings of the study, followed by a discussion of limitations of the current study and recommendations for future research. In the recommendations, issues considered and the contributions of the study are discussed.

5.1 Key Findings of the Study

The aim of this study was to explore the role of self-esteem in the relationship between ego identity and career aspiration in adolescents. Some key findings can be highlighted in summarising the findings of this study. To begin with, it was determined that the sample of adolescents from the Mangaung area in the Free State Province was interested in exploring medical professions as well as sciences. These findings reflect a picture of the type of careers to which black adolescents from this area of South Africa aspire. Second, it was found that most of the participants' parents had a Grade 12 level of education. Also, career aspiration, ego identity, and self-esteem levels of the sample were higher than the median was.

Another key finding refers to the moderating role of gender. In this study, gender did not moderate the relationship between ego identity and career aspiration in adolescents. It was postulated that the probable decline of gender stereotypes in this population group might explain the observed results.

Next, in relation to the first research question on the relationship between ego identity, career aspiration, and self-esteem, statistically significant positive correlations were found between ego identity and career aspiration, as well as between self-esteem and career aspiration. Although ego identity was expected to correlate with self-esteem, no significant correlations between ego identity and self-esteem were established in this study.

The second research question referred to the moderating or mediating role of self-esteem. Self-esteem did not have a moderating or mediating effect in the relationship between ego identity and career aspiration. Thus, self-esteem neither influenced nor mediated the relationship between ego identity and career aspiration. However, self-esteem produced a significant main effect. This implies that self-esteem explained a significant amount of variance in career aspiration for this particular sample.

5.2 Limitations of the Study

Some discrepancies mentioned in the discussion may be explained by the limitations of this study. First, this study was quantitative in nature and of a non-experimental type. The advantage of this approach is that it is an objective process and provides numerical data (Maree, 2011). Nevertheless, this approach does not allow in-depth exploration of participants' experiences with regard to the notion of career aspiration (Chinyamurindi, 2012; Stangor, 2015). In addition, this method does not capture how people make sense of contextual factors affecting development of career aspiration (Chinyamurindi, 2012). A cross-sectional research design was used to investigate the variables *career aspiration*, *ego identity*, and *self-esteem*. Thus, the results obtained are an indication of the participants' levels of career aspiration, ego identity, and self-esteem at the specific time when the study was carried out.

The study was conducted in only one high school in the Mangaung area of the Free State Province in South Africa with the aid of non-probability convenience sampling. This method is quick and less expensive, but does not result in representative samples (Stangor, 2015). For this reason, the results on the role of self-esteem in the relationship between ego identity and career aspiration in adolescents cannot be generalised to the general population in South Africa.

Self-report surveys were used to obtain data from the sample in the study. The shortcoming of using self-report surveys is that it raises the probability of participants not being truthful in their responses (Durrheim, 2010). Aspects such as response bias and social desirability (Foxcroft & Roodt, 2013) could have affected the internal consistency and validity of the measures used in the study. Another shortcoming of using surveys is that participants tend to provide responses according to their current mental state. Moreover, self-report surveys do not give participants the opportunity for detailed responses (Hall, 2008). However, the surveys used in this study have sound psychometric properties.

All the survey instruments were in English, whereas most of the participants' first language was Sesotho and Setswana. The language used in the questionnaires may have been difficult to understand for the learners. Therefore, the participants could have had difficulty making sense of more challenging terminology. This might account for the less than optimal reliability of the *EIPQ* (.65) and the *RSES* (.60). This is an indication that the participants might have been uncertain concerning what was measured, which could be explained by

language proficiency limitations. Moreover, survey instruments used were adopted from Western cultures, which could have a bearing on the results.

5.3 Recommendations for Future Studies

From the findings of this research study, the following recommendations can be made: First, it is suggested to make use of a mixed-methods approach (Chinyamurindi, 2012), which will give a better understanding of adolescents' personal views of career aspiration, ego identity, and self-esteem. Also, the use of longitudinal research will enable the researcher to assess the development of career aspiration, ego identity, and self-esteem over a period. This will yield results capturing the long-term development of the measured variables in individuals.

Second, it is recommended to make use of probability sampling techniques. A representative sampling will yield data that are more generalisable (Maree, 2010). Random sampling involving learners from all grades in different high schools and from different ethnic groups will provide results that are more generalisable and will give a better representation of career aspiration, ego identity, and self-esteem among black adolescents from various contexts.

It is also recommended that the language proficiency of participants can be tested prior to administering the questionnaires. Ideally, participants should be allowed to respond in the language in which they are most proficient (Foxcroft & Roodt, 2013). Consequently, it is recommended to make use of questionnaires that are available in the participants' home language or to make use of a trained translator when administering the survey instruments.

In this study, ego identity and self-esteem respectively accounted for 11.3% and 13.5% of variance in career aspiration. This means that other factors explain the remaining differences. Following the literature review, other predictors were identified. Consequently, a point of focus in future research would be to highlight factors linked to context and culture (Perry, 2009), given the drastic changes in the socio-economic and political fields in South Africa (Chinyamurindi, 2012). It is also recommended to focus on intrinsic factors such as self-determination, which might help to understand and guide adolescents faced with an ego identity crisis better. Hence, future studies should explore both intrinsic and extrinsic factors that influence development of career aspiration, ego identity, and self-esteem.

5.4 Conclusion

The aim of this study was to investigate the role of self-esteem in the relationship between ego identity and career aspiration. It was found that gender does not moderate the relationship between ego identity and career aspiration, as was hypothesised. Ego identity and self-esteem each independently contributed significantly to career aspiration in adolescents. Furthermore, statistically significant positive correlations were found between ego identity and career aspiration, as well as between self-esteem and career aspiration. Moreover, self-esteem did not have a moderating or a mediating role in the relationship between ego identity and career aspiration. However, self-esteem produced a significant main effect. From the results, the researcher concludes that the forming of ego identity and development of self-esteem influence career aspiration during adolescence.

This study contributed to the knowledge base. The findings of this study on career aspiration, ego identity, and self-esteem confirm and contrast previous studies. The applicability to a South African context was highlighted. Black adolescents from the population group under study face unique challenges, which affect the development of their career aspiration, ego identity, and self-esteem. The understanding of factors that influence the development of adolescents' self-esteem and ego identity and how these factors influence career aspiration in a South African context makes a positive contribution to theory.

In practical settings, adults should assist adolescents in fostering self-esteem and developing ego identity. Equally important, schools could identify ways to promote self-awareness. By providing adolescents with sufficient information on various careers, they can be assisted in making informed choices. In addition, to counter the risk of aspiring only to white-collar jobs as portrayed in this study, it is important to implement career-counselling programmes in all high schools.

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Appendix A–Biographic Questionnaire

Please answer the following questions by marking the appropriate box with an X

Gender				Male				Female		
Age	14	15	16	17	18	19	20	21	21+	
Grade			8	9	10	11	12			
What is your home language?										
What career do you have in mind?										
Do you live with your biological parents?					Both parents	Only one	None			
Are your biological parents ...?					Never married	Married	Divorced			
How many siblings do you have?										
Who is your primary caregiver?										
What is your mother's highest education level?										
What is your father's highest education level?										

Indicate all the people who are currently living in your household:

Appendix B–Informed Consent Document

April/ May 2016

Dear Participant

Thank you for your willingness to participate in this research study. The purpose of this research study is to explore your experiences and perceptions regarding being an adolescent in South Africa today. The information will be used by postgraduate Psychology students.

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 few biographic questions and some surveys.

If you have any questions or concerns, please feel free to talk to the facilitator.

Thank you

Postgraduate student

Catherine M. Shirima

Supervisor

Prof Luzelle Naudé

Email: naudel@ufs.ac.za

Informed consent form

I have read and understand the information on the form and I assent 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.

Name and surname _____

Signature: _____

Date: _____

Appendix C–Ethical Clearance Letter from the Research Ethics Committee of the Faculty of the Humanities



25 January 2016

Prof L. Naudé
Department of Psychology
UFS

Application for extension for ethical clearance: Living and learning in Central South Africa (UFS-HUM-2013-30)

Dear Prof Naudé

With reference to your application for extension for ethical clearance with the Faculty of the Humanities, I am pleased to inform you on behalf of the Research Ethics Committee of the faculty that you have been granted extension with the assumption that there are no major changes with regards to the study.

Thank you for submitting the application for extension. We wish you every success with your research.

Yours sincerely,

Prof LJS Botes
Dean: Faculty of the Humanities

Copy: Charné Vercueil (Research Co-ordinator: Faculty of the Humanities)



Appendix D–Ethical Clearance Letter from the Free State Department of Education

Enquiries: Dr. MC Liphapang
Ref: Research Permission L Naude
Tel. 051 404 9290
Email: maphokal@edu.fs.gov.za



Professor L Naude
35 Brebner Road
Bloemfontein

Dear Professor Naude

APPROVAL TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION

1. This letter serves as an acknowledgement of receipt of your request to conduct research in the Free State Department of Education for the 2015/2016 cycle.

Research Topic: Living and learning in Central South Africa.


Approval is herewith granted to conduct research in the following schools: Kaelang, Lekhulong, Lereko & Tsosetso

Target Population: Learners from Grade 8-12 both male and female

Period of research: August to September 2015 and February to September 2016. Please note that the department does not allow any research to be conducted during the fourth term (quarter) of the academic year.

2. Should you fall behind your schedule by three months to complete your research project in the approved period, you will need to apply for an extension.
3. The approval is subject to the following conditions:
 - 3.1 The collection of data should not interfere with the normal tuition time or teaching process.
 - 3.2 A bound copy of the research document should be submitted to the Free State Department of Education, Room 319, 3rd Floor, Old CNA Building, Charlotte Maxeke Street, Bloemfontein.
 - 3.3 You will be expected, on completion of your research study to make a presentation to the relevant stakeholders in the Department.
 - 3.4 The attached ethics documents must be adhered to in the discourse of your study in our department.
4. Please note that costs relating to all the conditions mentioned above are your own responsibility.

Yours sincerely


DR JEM SEKOLANYANE
CHIEF FINANCIAL OFFICER

DATE: 17/08/2015

Strategic Planning, Policy & Research Directorate
Private Bag X20565, Bloemfontein, 9300 - Room 318, Old CNA Building, 3rd Floor, Charlotte Maxeke Street, Bloemfontein
Tel: (051) 404 9283 / 9221 Fax: (086) 6678 678

Appendix E–Letter of Permission from the School Principal

April/May2016

Dear Principal

Request to conduct a research survey at your school

We would hereby like to ask your permission to conduct research at your school. The purpose of this research study is to explore adolescents' experiences and perceptions regarding being an adolescent in South Africa today. The information will be used by postgraduate Psychology students.

We would like your learners to complete a survey which will take approximately 30-45 minutes to complete.

Participation in this study is completely voluntary and learners may withdraw from the study at any point without any explanation. The study will be conducted in a confidential manner and all responses will be respected.

Permission from the Free State Department of Education as well as from the Research Ethics Committee of the Faculty of the Humanities has already been granted to conduct this research. This research is conducted under the supervision of Prof L. Naudé.

Please feel free to contact us if you require any further information

Thank you in anticipation.

Postgraduate student

Catherine M. Shirima

Supervisor

Prof. Luzelle Naudé

Email:naudel@ufs.ac.za

Letter of Permission from the Principal

I, _____, hereby provide permission to the Psychology students to continue with the research project discussed with me at _____ (name of school).

I acknowledge that I understand that involvement in this research project is voluntary and participants may withdraw at any point.

Signature: _____

Name: _____

Date: _____

Appendix F–Turnitin Report

Shirima Chapt 1-5

ORIGINALITY REPORT

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PRIMARY SOURCES

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4	link.springer.com Internet Source	<1 %
5	Szymanski, D. M., and K. F. Balsam. "Insidious Trauma: Examining the Relationship Between Heterosexism and Lesbians' PTSD Symptoms", Traumatology, 2011. Publication	<1 %
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