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**THE RELATIONSHIP BETWEEN ADOLESCENTS' SUBJECTIVE WELL-  
BEING AND CAREER ASPIRATIONS AMONGST ADOLESCENTS RESIDING  
IN LOW SOCIOECONOMIC STATUS COMMUNITIES IN CAPE TOWN: THE  
MEDIATING ROLE OF SOCIAL SUPPORT**

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**A mini-thesis submitted in partial fulfilment for the degree of Master of Arts in Psychology  
in the Department of Psychology, University of the Western Cape, Bellville**

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## Abstract

Adolescence is a critical developmental stage wherein adolescents face various challenges which potentially impact on the development of their future orientation, the setting of and working towards goals, and ultimately their life trajectories. Considering South Africa's socio-political history which has resulted in limitations regarding educational and career possibilities of adolescents, there is a need to examine factors that influence adolescents' aspirations. The current study thus aimed to ascertain the nature of the relation between adolescents' subjective well-being and career aspirations. Within this process, the study further aimed to ascertain the extent to which this relation is mediated by social support. The current study forms part of a larger study that explored the relation between adolescents' career aspirations and a range of personal and contextual factors, using a cross-sectional design. The sample comprised 1082 adolescents (males and females) in grades 8 to 11, purposively selected from eight schools in low-income communities in Cape Town, South Africa. Descriptive statistics were used to determine the levels of career aspirations, subjective well-being and social support among the participants. Mediation analysis using the bootstrap confidence interval approach, within a structural equation modelling data analysis framework was conducted to determine the extent to which social support mediates the relationship between subjective well-being and career aspirations. For the overall model using the pooled sample, the study found a non-significant relation between adolescents' subjective well-being and career aspirations. Across gender, the results demonstrated a significant relation between subjective well-being and career aspirations for the male group, explaining 2.1% of the variance in aspirations. However, a non-significant relation was obtained for the female group. An important finding of the study is that social support did not mediate the relation between adolescents' subjective well-being and career

aspirations for the pooled sample, and across both gender groups. For females, a significant negative relation was found between social support and aspirations. Results also revealed a significant negative relation between age and aspirations for both males and females. Social support and financial resources are important factors to consider in relation to adolescents' well-being and aspirations, especially given that the social support that females receive is informed by gender norms and cultural beliefs, which in turn hinders their aspirations. It is recommended that interventions are targeted at an institutional level, inclusive of challenging gender roles, providing information about educational and career opportunities for young people, and improving parenting skills in an effort to advance adolescents' career aspirations.



## **Declaration**

I declare that the current study ‘The relation between adolescents’ subjective well-being and career aspirations amongst adolescents in Cape Town: The mediating role of social support’, is my own work. It has not been submitted for any degree or examination in any university, and that all the sources I have used have been indicated and acknowledged as complete references.

**Donnay Anthea Manuel**

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## **Introduction**

### **Background**

Adolescence is one of the most challenging stages of the human development life span, encompassing a range of physical, social, sexual and cognitive changes (Barber & Eccles, 1992). Additionally, identity development and crucial decision-making have important implications for adolescents' future (Buthelezi, Alexander, & Seabi, 2009). Thus, Nurmi (1991) emphasises the development of adolescents' future orientation, particularly regarding setting of and working toward goals and future career and life aspirations. Accordingly, career aspirations play an important role in the development of adolescents' psychological well-being and life trajectory (Ryan & Deci, 2000).

The concept of aspirations has been defined as the capacity to identify and set future goals while being motivated to work toward those goals (Quaglia & Cobb, 1996). Based on this, career and educational goals are set based on adolescents' expectations concerning their future (Wall, Covell, & Macintyre, 1999). Adolescent career aspirations and goals help chart a life course and guides how time and energy are allotted to certain tasks (Nurmi, Salmela-Aro, & Koivisto, 2002; Salmela-Aro, 2009). However, adolescents are expected to encounter barriers associated with their goals. According to Hill, Ramirez, and Dumka (2003), the consideration of potential barriers may lead adolescents to shift focus and align their goals and aspirations to their expectancies to achieve them. Consequently, adolescents might choose to aspire to occupations that they perceive to have fewer barriers (Gottfredson, 1981). Considering the rapid changes taking place, the nature of stressors encountered and coping responses available during this



developmental stage (Swanson, Spencer & Petersen, 1998), the potential for both negative and positive outcomes are heightened (Barber & Eccles, 1992). Consequently, the importance of identifying and elucidating the factors that influence adolescents' aspirations has been underscored (Hendricks et al., 2015; Hellenga, Aber, & Rhodes, 2002).

The factors that influence adolescents' aspirations are personal and contextual. These include: self-esteem (see Mau & Bikos, 2000; McKay, Sumnall, Cole, & Percy, 2012); self-efficacy (see Bandura et al., 2001); school commitment (see Stewart, Stewart, & Simons, 2007); socio-economic status (SES) (see Cochran et al., 2011; Hill et al., 2004); and social support (see Hendricks et al., 2015; Hill et al., 2003; Otto, 1997; Shumba & Naong, 2012).

As children mature into the life stage of adolescence, their career aspirations are informed by their personal identities and context (Gutman & Schoon, 2012). That is, career aspirations emerge at the intersection of personal interests and capacities, socio-economic status, gender and external realities (Gottfredson, 1981). In terms of gender, studies have found differences in aspirations for males and females (see Ashby & Schoon, 2010; Gutman & Schoon, 2012; Howard et al., 2011; Meece, Askew, Agger, Hutchins, & Byun, 2014) influenced by cultural beliefs regarding gender roles, shaping males' and females' perceptions of their own abilities and relevant careers (Correll, 2001). In the same way, studies suggest that career aspirations change as children become older (see Patton & Creed, 2007; Sheldrake, 2018). These aspirations may initially be based on interests, with a lack of emphasis on realistic constraints (Ginzberg, 1952). However, during adolescence, career options often become narrowed and negotiated before final

decisions are made (Super, 1990) as a result of considering more realistic factors (Gottfredson, 1981).

Moreover, the literature also suggests an association between adolescents' subjective well-being (SWB) and aspirations (see Davids, Roman, & Kerchhoff, 2017; Eryilmaz, 2011; Snyder et al., 1991). SWB is a wide-ranging concept that refers to individuals cognitive and affective evaluations of their life, the circumstances affecting their lives and social context in which they live (Savahl & Adams et al., 2019.) While the cognitive component relates to how individuals' appraisals of their overall and domain-specific life satisfaction, the affective component encompasses negative and positive mood and feeling states (Diener, 2000).

Throughout the last few decades, the study of children's SWB has been an increasing concern of researchers (Bradshaw et al., 2007; Fattore et al., 2009; Savahl & Adams et al., 2019). For instance, many studies have specifically aimed to identify family, social and wider environmental factors that relate to children's SWB (see Adams & Savahl, 2017; Adams, Savahl & Fattore, 2017; Goswami, 2012; Patalay & Fitzsimons, 2016; Savahl & Adams et al., 2019). Essentially, research has indicated that SES, social support, community violence, gender, and age have an influence on the way which children perceive and evaluate their lives (see Diener, Diener, & Diener, 1995; González-Carrasco, Casas, Malo, Viñas, & Dinisman, 2017; Huang et al., 2017; Davidson & Cotter, 1991; Ronen, Hamama, Rosenbaum, & Mishely-Yarlap, 2016; Savahl, Adams, Carels & September, 2013; Sarriera, Bedin, Abs, Calza, & Casas, 2015; Pilkauskaite-Valickien & Gabrielaviciute, 2015).

Furthermore, a number of published studies have examined the mediating role that social support plays within certain relations such as the relation between the quality of friendship and psychological well-being, gratitude and school well-being, and loneliness and life satisfaction (see Bakalim & Taşdelen-Karçkay, 2016; Sun, Jiang, Chu, & Qian, 2014; Yildiz & Karadas, 2017). According to Bennett (2000), mediator variables provide useful information about how, why, or when a phenomenon occurs and can be understood as a third variable that may change the association between variables.

## **Rationale**

The limitations regarding educational and career possibilities of South African adolescents are rooted in the country's socio-political history characterised by a system of government that disenfranchised people according to race (Savahl et al., 2015). Under the apartheid government, the education system available to disadvantaged and oppressed groups was limiting in many aspects, including future career possibilities (Buthelezi et al., 2009). This is echoed by Bray et al. (2010) who state that unequal social backgrounds, in general, reinforce unequal conditions in schools themselves. Today, this oppression still has an impact on individuals' personal development (Buthelezi et al., 2009).

Given the general lack of empirical research on adolescents' career aspirations (Hendricks et al., 2015); contextual factors that influence adolescents' aspirations (Shumba & Naong, 2012); and the specific lack of research on the relation between adolescents' SWB and career aspirations within the South African context, the current study has relevance and strives to make a contribution on three levels. First, it contributes to a limited empirical literature base on the relation between SWB and career aspirations within the South African context. In addition, it

brings into focus the important mediating influence of social support (Barber & Eccles, 1992), highlighting its potential to act as a buffer against contextual realities that could hinder positive psychological development (Otto, 1977). Second, it has the potential to contribute to professional practice, as the findings of the study would be useful for practitioners involved in career guidance. Third, the study could contribute to advancing theoretical models of adolescent SWB, decision-making, and aspirations.

### **Aims and objectives**

The overarching aim of the current study was to explore the relation between SWB and career aspirations amongst a sample of adolescents from low SES communities in the Cape Town Metropole. More specifically, the study aimed to ascertain the extent to which the relation between SWB and career aspirations is mediated by social support. Finally, the study aimed to determine the extent to which gender and age influenced the overall relation. The following objectives guided the study:

#### ***Objectives***

1. To determine the relation between adolescents' SWB and career aspirations
2. To determine the extent to which the relation between adolescents' SWB and career aspirations is mediated by social support
3. To determine the extent to which the mediation differs across gender
4. To determine the extent to which the mediation is influenced by age

## Literature Review

### Contextual and social factors influencing aspirations

Social backgrounds of adolescents play an important role in their career aspirations. This role was highlighted in a longitudinal study conducted by Hill et al. (2004) who investigated parents' academic involvement, behavioural problems, achievement, and aspirations among 463 adolescents (12 – 16 years) from different SES contexts. SES was measured using parental education, family income, and occupational status; school behaviour problems were evaluated by means of teachers completing the Teacher Report Form of the Child Behaviour Checklist; while school academic records were utilised to determine academic achievement. Further, adolescent aspirations were measured using two items from the Expectations/Aspirations scale that asks adolescents to report on their chances of completing high school and going to college (Hill et al., 2004). Findings reveal that parents from low SES backgrounds have difficulty in positively influencing adolescents' education, whereas adolescents from higher SES families may follow their parents' positive educational experiences (Hill et al., 2004).

Similarly, Cochran et al. (2011) conducted a longitudinal study investigating the relation between adolescent occupational aspirations and midlife career success. The authors hypothesised that parental SES, ability, and gender were adequate predictors of adolescent occupational aspirations, and influenced career achievement in later life; which is consistent with Duncan, Featherman, and Duncan's (1972) model of the tripartite nature of SES. A large sample of American adolescents (ages 15 – 17 years) was obtained from the NLSY79 (a nationally representative sample of randomly selected Americans born during the 1950s and 1960s). These adolescents were surveyed annually from 1979 to 1994, and biannually after 1994 (Cochran et

al., 2011). SES was measured using family income, parental level of education, and parental occupations. Cochran et al. (2011) identified ability as a strong predictor for adolescent occupational aspirations, while parental SES contributed to adolescent occupational aspirations to a much smaller extent. Fundamentally, adolescents from more affluent families tended to have a higher measured ability and, therefore, aspired to more prestigious occupations (Cochran et al., 2011). These results echoed earlier findings by Erikson and Jonsson (1996), and Sewell and Shah (1968) that SES is transmitted across generations.

Conversely, Hellenga et al. (2002) investigated the vocational aspirations and expectations of 160 'Black' adolescent girls, between the ages of 13-19 years, residing in poor urban communities. They found that although participants in their study resided in low-income communities where participants identified social structures, economic disadvantage, and lack of opportunities as barriers of their vocational outlook, they presented with high levels of aspirations. In line with these findings, a local study conducted by Hendricks et al. (2015) demonstrated high levels of aspirations among adolescents residing in a low SES community in Cape Town, South Africa, whereby intra-personal factors and social support were identified as predominant factors influencing their aspirations.

Poverty has also been shown to have an important influence on adolescents' aspirations. Poverty reduces the ability of parents to provide adequate nutrition, which is necessary for healthy development and access to good educational opportunities for children (Bray, Gooskens, Kahn, Moses, & Seekings, 2010). Additionally, parents living in poverty are likely to be less educated and thus less able to support their children's educational development (Kotchick &

Forehand, 2002). It can, therefore, be suggested that poverty can significantly undermine parenting, decrease the life chances of children, and thereby transmit poverty from one generation to the next. Thus, in communities where economic resources are limited and high levels of unemployment and low levels of education exist, the chances are higher that adolescents' aspirations will be negatively affected (Hendricks et al., 2015; Migunde, Agak, & Odiwuor, 2011).

The literature shows conflicting results in terms of gender differences in career aspirations. Meece, Askew, Agger, Hutchins, and Byun (2014) examined the influence of familial, geographic, and economic variables on gender-related differences in educational and occupational aspirations. The survey included 50 rating-scale and open-ended items to assess students' SES; academic progress; family and peer relations; aspirations and plans for the future; high school experiences; extracurricular activities; achievement-related motivation and educational and occupational barriers (Meece et al., 2014, p. 6). The study revealed that girls reported higher levels of educational aspirations, academic achievement and post-secondary education preparation, and placed more value on schooling than boys. Similar results were attained by Mau and Bikos (2000) who found that girls had higher aspirations than boys; and Howard et al. (2011) who found that girls were more likely to aspire to careers that required higher educational levels than boys.

Furthermore, Gutman and Schoon (2012) investigated the correlates of uncertainty related to male and female adolescents' career aspirations and later outcomes. The study used data collected from the Longitudinal Study of Young People in England (LSYPE) including

participants aged 14 to 18 years; and data from the National Pupil Database as an indicator of academic performance at age 11. The total sample consisted of 4120 females and 4189 males (Gutman & Schoon, 2012). The results indicate that parents had higher educational expectations for their daughters than for their sons. While males reported higher levels of ability than females, females reported higher levels of school motivation. The results also show that males reported greater levels of uncertainty in their career aspirations than females (Gutman & Schoon, 2012).

Patton and Creed (2007) examined the links between aspirations, occupational expectations, career status aspirations, and career status expectations among 925 (535 female and 390 male) Australian high school students in grades 6 to 12 from lower-middle level SES areas. The study found that males initially aspired to more professional careers than girls. However, an increase in expectations for semi-professional occupations was noted in males as they aged, representing the earlier circumscription of females. On the other hand, females demonstrated significant differences in categories of both aspirations and expectations across years (Patton & Creed, 2007; Reyes, Kobus, & Gillock, 1999).

In addition, Sheldrake (2018) aimed to explore which characteristics of children would potentially lead them to aspire towards science-related careers and how these aspirations change over time. The total sample consisted of 7820 children from England using a nationally representative Millennium Cohort Study. The results suggest that while a small proportion of students consistently expressed science-related career aspirations at age 11 and again at age 14, the majority of the sample changed their career aspirations during this period (Sheldrake, 2018).



Social support is an important influential factor of adolescent career aspirations (Constantine, Wallace, & Kindaichi, 2005; Malecki & Demaray, 2003; Richman, Rosenfeld, & Bowen, 1998; Young, Friesen, & Dillabough, 1991). The association between social support and aspirations has been emphasised by McWhirter et al. (2013). Their study aimed to provide descriptive information about post-secondary school goals and the barriers and support experienced by Latina high school girls. Six semi-structured focus groups were conducted with 41 Latina high school students between the ages of 14 and 19 years. Findings indicated that discrimination from teachers, peers, and adolescents' families were believed to inhibit career aspirations.

Similarly, a study by Hendricks et al. (2015) aimed to determine the influences on adolescents' aspirations from a low-income community in Cape Town using a mixed-methods design. The qualitative phase of the study comprised focus groups with 118 adolescents (16 – 19 years); while in the quantitative phase 191 adolescents completed the Expectations/Aspirations Scale, the New General Self-Efficacy Scale, the Rosenberg Self-Esteem Scale, and the Multidimensional Scale of Perceived Social Support. Social support was found to significantly predict adolescents' aspirations, and a lack of social support was specifically identified as a factor that hindered adolescents' aspirations (Hendricks et al., 2015).

Similarly, Hill et al. (2003) examined career aspirations, perceived barriers, and family support among low-income African American, Euro-American, Mexican American, and Mexican immigrant early adolescents. Semi-structured interviews were conducted with a total of 31 adolescents (16 girls and 15 boys), ranging between the ages of 12 and 14 years (Hill et al.,

2003). The findings demonstrated the importance of family support and its association with perceived barriers for adolescent career aspirations (Hill et al., 2003).

The relation between social support and aspirations was further demonstrated by Shumba and Naong (2012). The authors focused on the factors influencing students' career choice and aspirations in South Africa. A survey method was used to identify the factors that influence career choice and aspirations using the Career Aspirations Questionnaire, a structured questionnaire. A purposive sample of 133 first- and second-year university students (77 females, 56 males) between the ages of 15 to 30-years old (Shumba & Naong, 2012) was recruited. The family was found to be a significant factor in determining children's career choice and aspirations, along with teachers' influence on career choices of their learners (Shumba & Naong, 2012).

Research also suggests that social support consists of many levels, of which one is friends (Hendricks et al., 2015). For instance, previous research by Otto (1977) explored whether girlfriends function as 'significant-others' in the male achievement process and whether girlfriends and best friends (same-sex) provide educational encouragement on the basis of the same criteria of their parents. The analysis was based on data gathered from 137 17-year old males enrolled in Lenawee County, Michigan high schools in 1957 that reported having a girlfriend and were followed up fifteen years later. The study indicated that girlfriends influence young men's career aspirations and achievements; while parents and teachers provide reinforcement and educational encouragement (Otto, 1997).

## **Subjective well-being and aspirations**

Research shows that a relationship exists between SWB and aspirations. Eryilmaz (2011) examined the relation between adolescents' SWB and positive expectations towards the future. A total of 233 adolescents (121 males and 112 females) between 14 and 17-years old participated in the study. Data were collected using the Adolescents' Subjective Well-Being Scale and Positive Future Expectations Scale. According to the findings, adolescent SWB increased significantly when adolescents had positive expectations for the future (Eryilmaz, 2011).

In line with this study, Davids et al. (2017) conducted a study in South Africa aiming to establish the relation between goals and aspirations, mental health behaviour, and psychological well-being. A sample of 457 secondary school learners participated in this study, residing in the Overberg Educational District, located in the Western Cape, South Africa. The data were collected using a self-report questionnaire comprising demographic details, the Aspirations Index, Positive and Negative Affect Schedule, and Health-Promoting Lifestyle Profile II Questionnaire. The results showed a positive relation between placing importance on intrinsic goals and aspirations and psychological well-being. Intrinsic goals and aspirations served as a significant predictor of psychological well-being (Davids et al., 2017).

## **Social support as a mediator**

It is important to note that social support can also act as a mediator. Yarcheski and Mahon (1999) examined the mediating and moderating role of social support in the relation between perceived stress and symptom patterns in early adolescence. The sample included an urban middle school serving several small middle-class communities in a mid-Atlantic state. The

total sample included 148 male and female early adolescents between the ages of 12 and 14 years, and used the Perceived Stress Scale, the Personal Resource Questionnaire 85–Part II, and the Symptom Pattern Scale (Yarcheski & Mahon, 1999). The study revealed that perceived social support played the role of a mediator in the perceived stress-symptom pattern relationship in early adolescence (Yarcheski & Mahon, 1999).

Furthermore, Ni, Yang, Zhang, and Dong (2015) investigated the mediating role of social support in the relation between gratitude and loneliness of Chinese college students. The sample consisted of 728 Chinese students from six universities, who completed the Gratitude Questionnaire-6 Scale, the UCLA Loneliness Scale (version 3), and the Social Support Rating Scale (Ni et al., 2015). Their study found that both gratitude and social support exerted protective effects against loneliness, while social support partially mediated the relation between gratitude and loneliness. In other words, when individuals feel gratitude to a high degree, they obtain more social support and, thus, feel less lonely than those who feel less gratitude (Ni et al., 2015).

Along these lines, Yildiz and Karadas (2017) examined the serial-multiple mediation role of self-esteem and perceived social support on the relation between university students' loneliness and life satisfaction. The study utilised 398 undergraduate students (289 females and 109 males) aged between 17 and 41-years old, who completed the UCLA Loneliness Scale Short Form, the Reviewed Form of the Multi-Dimensional Perceived Social Support Scale, Rosenberg Self-Esteem Scale; the Satisfaction with Life Scale, and the Personal Information Form (Yildiz & Karadas, 2017). Akin to findings of the abovementioned study, results indicated that the mediation effect of self-esteem and perceived social support were higher for the relation between

loneliness and life satisfaction when entered into the model separately, rather than entering these variables together. Additionally, perceived social support was found to have a significant mediating effect on life satisfaction (Yildiz & Karadas, 2017). Thus, these results suggest that as perceived social support contributes to well-being, it contributes to life satisfaction (Yildiz & Karadas, 2017).

In a similar study, Sun, Jiang, Chu, and Qian (2014) investigated the relation between gratitude and school well-being, and the mediating effect of interpersonal relation and social support. A total of 782 Chinese undergraduate students completed measures of gratitude, interpersonal relationships, social support, school satisfaction, positive affect, and negative affect in school. The results revealed that gratitude was positively associated with school well-being and that both interpersonal relationships and social support acted as mediators of this relation (Sun et al., 2014). This study, therefore, confirms the mediating role that social support may play on relations between various variables.

A study conducted by Bakalim and Taşdelen-Karçkay (2016) focused on the mediating role of perceived social support between friendship quality and psychological well-being. A total of 529 adolescents (309 girls and 220 boys) between grades 9 to 12 from six high schools from the city of Uşak, Turkey participated in the study. The participants completed the Friendship Qualities Scale and the Multidimensional Scale of Perceived Social Support. Structural Equation Modeling (SEM) techniques were used to assess the mediation model (Bakalim & Taşdelen-Karçkay, 2016). The results showed that the family aspect of social support fully mediated the relation between companionship- and conflict-friendship quality and psychological well-being.

Overall, the study indicated that different levels of social support such as family, friends, and significant others mediated the relation between friendship quality and psychological well-being (Bakalim & Taşdelen-Karçkay, 2016).

### **Summary of the literature**

Taken together, within the literature on adolescent aspirations, local and international studies have reported that social and contextual factors exert a clear influence on aspirations. Parental social backgrounds, educational involvement, SES, gender, age, and social support have shown to hinder, elevate, or alter adolescents' aspirations. It is noteworthy that studies have also indicated that regardless of whether adolescents reside in constrained contexts, their levels of aspirations remained high. In terms of social support, there is extensive literature delineating its mediating role within various relations pertaining to well-being, life satisfaction, quality relationships, gratitude, loneliness, and stress. Although there is a vast body of research on goals and aspirations and SWB, there has been relatively little attention to the connections between adolescent SWB and career aspirations, with the consideration of the role of social support as a mediator. It is through this gap in the literature, that the current study finds traction.

### **Theoretical framework: Homeostasis Theory of Subjective Well-Being**

Although aspirations and goals have been researched extensively in relation to well-being, there are few theories put forward that consider this relation. While the current study focuses on SWB, aspirations, and the role of social support, it is important to consider the Self-Determination Theory (Deci & Ryan, 2008) and other eudaimonic theories. Aspirations are embedded in the eudaimonic tradition and encompassed within quality of life studies.

Aspirations may be intrinsic or extrinsic. The former involves personal growth, community involvement, and affiliation, whereas the latter is demonstrated by wealth, fame, and image (Sheldon & Lucas, 2014). Placing greater value on extrinsic goals has been associated with depression, anxiety, and physical symptoms, while intrinsic goals are positively associated with happiness, self-actualisation, and vitality (Oishi, 2000; Sheldon & Lucas, 2014).

It is important to note that life aspirations partly reflect the cultural and economic conditions in which people live. Kasser et al. (2004) suggest that materialistic pursuits have been evolutionarily ingrained within humans to feel more secure and safe. In his theory of post-materialism, Inglehart (1977) contends that people pursue various goals in a hierarchical order. In other words, people will aspire to freedom and autonomy only after they meet survival needs. This could explain the relative importance of extrinsic goals for well-being in poorer countries. Given this, Cummins's Homeostasis Theory of Subjective Well-Being will be used as the theoretical framework to guide the study.

Cummins's Homeostasis Theory of Subjective Well-Being proposes that SWB is regulated by genetic and neurological processes (Cummins, 2010). Just as homeostasis maintains body temperature, homeostasis, as applied to SWB, aims to maintain a normal, positive set-point range which is suggested to fall between 60 and 90, with a mean of 75 points (Cummins, 2010). Set-point ranges are genetically determined (Cummins, Gullone, & Lau, 2002), and specific to the individual (Cummins, 2010). One of the key concepts of the Homeostasis Theory is that of the threshold, which is evident at the margins of the innate set-point range. It is proposed that as SWB moves toward these boundaries the system strains to resist change. If the threshold is



exceeded, the system attempts to revert to the 'normal' SWB range (Cummins, 2010; Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003). To maintain SWB homeostasis, three buffers are employed. The first buffer is that of behaviour, considered as an internal buffer pertaining to how individuals adapt to positive challenges and navigate through life for it to be more manageable. Relationship intimacy and money constitute two external buffers that assist in adaptation to negative challenges. Various studies suggest that both social support and SES can influence individuals' levels of SWB whereby high levels of social support can facilitate high levels of SWB (see Malecki & Demaray, 2006), while a lack of social support can reduce levels of SWB (see Huurre, Eerola, Rahkonen, & Aro, 2007). Further, the literature points to how SES can either have a negative or positive impact on an individual's levels of SWB (see Huang et al., 2017; Lever et al., 2005). However, while internal and external buffers actively protect SWB, when the system fails to maintain SWB homeostasis, the individual will experience adverse psychological outcomes. Savahl and Montserrat et al. (2019) for example, has shown how bullying victimization could potentially defeat the homeostatic threshold and lead to a negative psychological outcomes.

Researchers agree that SWB encompasses a cognitive and affective component (see Diener et al., 2006; Diener et al., 1995). One of the key elements of this theory is the affective component known as Homeostatically Protected Mood (HPMood); a deep, enduring positive mood (Cummins, 2010). HPMood is a blend of both hedonic (pleasant) and arousal values (activation) which, Cummins (2014) suggests, can be measured by asking people how they feel regarding three affective states, namely 'contented', 'happy', and 'alert'. Cummins (2014) further proposes that each person has their own genetically generated level of HPMood,



providing them with a unique level of positivity, which represents their set-point, the level of SWB which homeostasis seeks to uphold (Cummins, 2014; Tomy, Weinberg, & Cummins, 2011).

In the current study, Homeostasis Theory is used to determine not only the extent to which SWB is maintained in a low SES context, but also how the homeostatic maintenance of the system influences aspirations, and how social support acts as a buffer in mediating the relation between SWB and career aspirations. Using Homeostatic Theory as the theoretical lens to frame the study allows for the determination of how the limits of aspirations are set based on the maintenance of SWB.



## Method

### Research design

The study used secondary data from a larger study that aimed to explore the relation between adolescents' aspirations and a range of personal and contextual factors. The larger study used a cross-sectional survey design conducted amongst a sample of adolescents attending secondary schools in the Cape Town Metropole.

### Research context

Regardless of the fundamental premise of equality in the South African Constitution, inequality remains pervasive in the country (Adams & Savahl, 2015). Considered to be amongst the highest in the world, South Africa's Gini coefficient of 0.63 in 2015 (World Bank, 2018) points to the high levels of social inequality demonstrated by a great dispersion of wealth and income between the privileged and disadvantaged (Savahl et al., 2016). Fundamentally, this has resulted in the

differentiation between high SES and low SES communities (Savahl et al., 2016) which are characterised by high income, high educational attainment, high levels of employment, and low incidence of violence and low educational attainment and income, high rates of substance use, unemployment, crime, and violence respectively (Savahl et al., 2016). Adolescents and young people are particularly negatively influenced by the multitude of these contextual realities.

## **Participants**

The sampling frame of the study was adolescents attending high schools in low SES communities in the Cape Town Metropole. Non-probability sampling was used to select two schools from each of the four metro Education Management District Councils of the Western Cape Education Department (Metro North, Metro South, Metro East, and Metro Central). The enrolment figures of the school ranged from 554 to 1467. One class per grade (8 – 11) was randomly selected in collaboration with the life-skills teacher at the school. The final sample comprised 1082 adolescents (males = 449; females = 631) between the ages of 13 and 17 years.

## **Instrumentation**

An instrument consisting of the following scales was used (see Appendix A): The Expectations/Aspirations Scale (Loeber, Stouthamer-Loeber, Van Kammen, & Farrington, 1991); the Students' Life Satisfaction Scale (SLSS) (Huebner, 1991); and the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988).

### ***Students' Life Satisfaction Scale***

The SLSS was developed by Huebner (1991) to assess the global life satisfaction of children between the ages of 8 and 18 years. The scale consists of seven context-free items that require participants to indicate their level of satisfaction with their lives. For this study, a 0 – 10 end-labelled unipolar agreement scale was used (0 = Not at all agree; 10 = Totally agree) as recommended by Cummins and Gullone (2000), and further supported by studies conducted in South Africa (see Savahl, Casas, & Adams, 2017). The original scale consists of two negatively phrased items that were removed due to previous research demonstrating low factor loadings (see Casas & Rees, 2015). The scale has a Cronbach's coefficient alpha ranging between .70 and .80, which is indicative of good internal consistency (see Boyle, 1991; Lyons, Huebner, & Hills, 2013). The scale has been previously adapted to the South African context where it showed sound structural and convergent validity, and a good reliability co-efficient ( $\alpha = .75$ ), amongst a sample of children in the Western Cape (Savahl et al., 2017).

### ***Expectations/Aspirations Scale***

Adolescents' career aspirations were assessed using the Expectations/Aspirations Scale. The Expectations/Aspirations Scale is a 4-point rating scale consisting of 22 items developed by Loeber et al. (1991). The scale consists of three sub-scales, namely Current Importance (Cronbach's alpha = .79), Future Expectations I (Cronbach's alpha = .82) and Future Expectations II (Cronbach's alpha = .82) (Loeber et al., 1991). Overall, the measure assesses children's feelings in relation to how important specific goals are; how far they would like to go in school; how far they think they will go in school; and how likely it is that they will meet specific goals. However, for the purpose of the current study only three of the items were used

*(To have a well-paying job when you start working; To have a good reputation in the community regarding your job; To work hard and have a successful career)* as these items specifically focus on career aspirations. These three items will collectively be referred to as the Career Aspirations Sub-scale (CAS).

### ***Multidimensional Scale of Perceived Social Support***

The MSPSS is a self-report measure that assesses individual's social support across a range of domains, including significant other, family, and friends (Zimet et al., 1988). The scale is based on a 7-point agreement scale ranging from 1 = Very strongly disagree to 7 = Very strongly agree. The MSPSS consists of 12 items that address social support, divided into the three identified sources of social support (significant other, family, and friends) and three subscales, namely Significant Other, Family, and Friends. The Cronbach's alpha for the overall scale, ( $\alpha = .88$ ), and subscales, ( $\alpha = .91$  for Significant Other,  $\alpha = .87$  for Family, and  $\alpha = 0.85$  for Friends) are acceptable. These values indicate acceptable internal consistency. In the current study, the categories of school and community support (each comprising three items), were added. The final social support scale, therefore, consisted of 18 items across 5 categories.

The English questionnaire was translated into Afrikaans (using the backward-translation method) given that these languages are the two predominantly spoken in the Western Cape (Statistics South Africa, 2018). Participants were thus given the opportunity to complete the questionnaire in English or Afrikaans. Both versions of the questionnaire were cognitively tested with two groups of adolescents consisting of eight participants per group. This process was undertaken to establish the validity of the instrument. The cognitive testing was completed

through the conceptual review of each item of the scales in terms of construct appropriateness, scale format, scale response options, and the wording of the items. The participants in the cognitive testing group made a range of recommendations that included the rewording and rephrasing of certain items for it to be more appropriate for adolescents' conceptual understanding.

### **Ethics and procedure**

Ethics clearance was obtained for the larger study from the Human and Social Sciences Research Ethics Committee of the University of the Western Cape (Ethics Reference Number: 13/05/20). Permission to use the data was granted by the principal investigator of the original study, who is also the supervisor of the current study. Permission to gain access to the schools was obtained from the Western Cape Education Department, and subsequently the school principals. Prior to conducting the study, the rationale, purpose of the study, as well as ethics principles of confidentiality, anonymity, and the right to withdraw was discussed with the participants. The potential participants were also advised on the intended use of the data, the likely future use of the data, and the benefits and risks of the study. Informed consent was obtained from parents/guardians as well as the adolescents themselves. Data were collected during an administration period at the beginning of the school day, following a researcher-administered protocol. The questionnaire took approximately 20 minutes to complete.

### **Data analysis**

Descriptive statistics (means and standard deviations) were used to determine adolescents' levels of career aspirations, SWB, and social support. Mediation analysis using SEM was conducted to

determine the extent to which social support mediates the relation between SWB and career aspirations using AMOS 25. Prior to conducting SEM, CFA was used to determine the structural validity of the latent factors.

SEM represents a set of data analysis procedures wherein a series of hypotheses about how the variables in the analysis are related are tested (Hu & Bentler, 1999), and includes techniques such as CFA, multiple regression and path analysis (Schreiber, Nora, Stage, Barlow, & King, 2006). Assessment of model fit, and the estimation of parameters are the key pursuits of SEM (Savahl et al., 2017). SEM provides a framework wherein proposed theoretical models are assessed against a set of observed data (Hox & Bechger, 1998). Model fit is determined by the computation of Model Fit Statistics, whereby a series of indices are used to assess the extent of the fit. In the current study, the chi-square and approximate fit indices were used to determine model fit. More specifically, the Comparative Fit Index (CFI), Standardised Root Mean Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA) was used as the fit indices. Following recommendation by Jackson et al. (2009) and Kline (2011) cut scores of  $>.95$  for CFI and  $<.05$  for RMSEA and SRMR were used.

Finally, multi-group confirmatory factor analysis (MGCFA) and multi-group structural equation modelling (MGSEM) was conducted to ascertain the measurement invariance of the model across gender. Measurement invariance refers to the extent to which items on the latent variable have the same meaning between groups and is a pre-requisite for determining meaningful, unambiguous comparisons between groups (Meredith, 1993; Millsap & Olivera-Aguilar, 2012). Measurement invariance was assessed through a series of multi-group models

across the three groups (age, gender and geographical context). Each model was tested through three sequential steps wherein increasingly restrictive constraints were incrementally applied to the baseline model. In the first step, configural invariance was tested with unconstrained loadings and intercepts representing the baseline model. In the next step, metric invariance was tested by constraining the factor loadings. Thereafter, scalar invariance was tested by constraining the factor loadings and intercepts. Each subsequent constrained model was regarded as tenable if the model fit did not worsen by more than 0.01 on the CFI (Cheung & Rensvold, 2002) and by 0.015 on the RMSEA and SRMR (Chen, 2007).

Gunzler, Chen, and Zhang (2013) point to the appropriateness of using SEM for mediation analysis. Conducting mediation analysis using SEM proceeds with determining the relation between the exogenous (SWB) and the endogenous (career aspirations) variables computed using a standardised regression equation. This represents the direct effect between the exogenous and endogenous variables. If the appropriate model fit is achieved, the next step involves the addition of the mediator variable (social support) into the model and including regression paths between the exogenous variable to the mediator variable; and between the mediator variable to the endogenous variable. These paths represent the indirect effects. Assuming appropriate model fit is achieved, there are three possible outcomes of the mediation analysis:

1. No mediation (the mediator variable does not significantly change the relation between the exogenous and the endogenous variable – the indirect effect is not significant)
2. Partial mediation (both the direct and indirect effect is significant)

3. Full mediation (the indirect effect is significant, and the direct effect is no longer significant, with the addition of the mediator variable) (Gunzler et al., 2013).

The literature proposes a number of approaches for the assessment of mediation. Debates regarding the most effective approach are on-going and generally relate to the considerations of statistical power of the test, the presence of Type 1 and 2 errors, and assumptions of normality (see Yzerbyt, Muller, Batailler, & Judd, 2018). In the current study, the bootstrap percentile approach (95% confidence interval) was applied. The bootstrap procedure is a non-parametric statistical technique which allows for statistical inference of the population through the process of resampling (with replacement values) from the existing sample (Mooney, 2011). In mediation analysis, the bootstrap approach is advantageous as it takes into consideration the likelihood of correlated coefficients and does not require the data to be normally distributed. This approach generates the 95% confidence interval for the true value of the product of the indirect effects based on the resampling procedures. In this instance, the null hypothesis is that the product of the coefficients of the indirect effect is zero. Therefore, when using the bootstrap approach, if zero falls outside of the interval, the null hypothesis can be rejected, indicating the presence of mediation. The motivation for using this approach is the likelihood of non-normal distributions and correlated coefficients of the variables under investigation in the current study. Furthermore, in a recent simulation study, Yzerbyt et al. (2018) confirm the appropriateness of using the bootstrap percentile method given that it generates sufficient statistical power while maintaining satisfactory levels of Type 1 error. They recommend, however, that the confidence intervals of the individual coefficients between the indirect paths is examined and reported, as opposed to only reporting on the overall indirect effect.



Prior to the application of CFA and SEM, a missing data analysis of the scales under consideration was conducted. Of the final sample of 1082, it was found that 37 cases presented with missing data of more than 25% of missing items, and these cases were deleted from the dataset. The remaining 1045 cases showed missing data of less than 5%, which were found to be missing completely at random (using Little’s test in SPSS;  $p > .05$ ). Regression imputation was used to attend to the missing data, as recommended by Casas (2016).

## Results

### Descriptive results

The sample consisted of 1045 high school students between the ages of 13 to 18-years, with a gender composition of 58.1% females and 41.9% males, selected from low SES communities in Cape Town, South Africa. For the SLSS the overall mean score was 6.2 (SD = 2.22), with item mean scores ranging from 5.72 (SD = 2.85; *I have what I want in my life*) to 6.76 (SD = 2.56; *I have a good life*). Males ( $\bar{x} = 6.38$ ; SD = 2.12) presented with a higher mean score for the SLSS, in comparison to females ( $\bar{x} = 6.07$ ; SD = 2.28) (see Table 1).

Table 1

*SLSS item and total mean scores*

	N	Overall		Male		Female	
		Mean	SD	Mean	SD	Mean	SD
My life is going well	1045	6.62	2.43	6.71	2.38	6.56	2.47
My life is just right	1045	6.32	2.62	6.42	2.57	6.24	2.65
I have a good life	1045	6.76	2.56	7.09	2.39	6.53	2.66
I have what I want in my life	1045	5.72	2.85	5.83	2.83	5.64	2.86
My life is better than most others my age	1045	6.08	3.02	6.31	2.88	5.91	3.11
The things in my life are excellent	1045	5.72	2.75	5.94	2.64	5.55	2.83
SLSS Total	1045	6.20	2.22	6.38	2.12	6.07	2.28

\*on a 0 – 10 end-labelled agreement scale

For the purpose of the study, only three of the items from the Expectations/Aspirations Scale (*To have a well-paying job when you start working; To have a good reputation in the community; To work hard have a successful career*) were used as these assess career aspirations. Using these items as a scale, the overall mean score was 3.57 (SD = .6) with the lowest mean score of 3.32 (SD = .82) and the highest of 3.76 (SD = .64). Females ( $\bar{x}$  = 3.61; SD = .57) demonstrated a higher mean score than males ( $\bar{x}$  = 3.50; SD = .64) (see Table 2).

Table 2

*Career aspirations item and total mean scores*

	N	Overall		Male		Female	
		Mean	SD	Mean	SD	Mean	SD
To have a well-paying job when you start working	1045	3.62	.73	3.59	.76	3.64	.71
To have a good reputation in the community regarding your job	1045	3.32	.82	3.21	.87	3.41	.77
To work hard have a successful career	1045	3.76	.64	1.58	.82	1.41	.71
Career Aspirations Total	1045	3.57	.60	3.50	.64	3.61	.57

\*on a 4-point rating scale

The MSPSS presented an overall mean score of 4.85 (SD = 1.05) and item mean scores ranging from 3.37 (SD = 1.98; *I can count on my community when things go wrong*) to 5.73 (SD = 1.63; *There is a special person in my life that cares about my feelings*). Females ( $\bar{x}$  = 4.89; SD = 1.06) had a higher mean score than males ( $\bar{x}$  = 4.80; SD = 1.03) (see Table 3).

The reliability coefficients for the three scales were acceptable and all above .75: for the SLSS,  $\alpha$  = .9; for the MSPSS,  $\alpha$  = .89; and for the Aspirations/Expectations,  $\alpha$  = .75.

Table 3

*The MSPSS item and total mean scores*

	<b>N</b>	<b>Overall Mean</b>	<b>SD</b>	<b>Male</b>		<b>Female</b>	
				<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
There is a special person who is around when I am in need	1045	5.62	1.56	5.49	1.54	5.72	1.58
There is a special person with whom I can share my joys and sorrows	1045	5.68	1.61	5.40	1.65	5.87	1.54
My family tries to help me	1045	5.62	1.55	5.71	1.46	5.55	1.61
I get the emotional help and support I need from my family	1045	5.30	1.71	5.33	1.67	5.29	1.74
I have a special person who is a source of comfort to me	1045	5.70	1.57	5.60	1.54	5.77	1.59
My friends try to help me	1045	5.00	1.60	4.84	1.59	5.11	1.61
I can count on my friends when things go wrong	1045	4.68	1.81	4.55	1.80	4.77	1.82
I can talk about my personal problems with my family	1045	4.50	2.09	4.59	2.06	4.43	2.11
I have friends with whom I can share my joys and sorrows	1045	5.07	1.75	4.82	1.79	5.25	1.70
There is a special person in my life that cares about my feelings	1045	5.73	1.63	5.59	1.65	5.83	1.61
My family is willing to help me make decisions	1045	5.41	1.69	5.49	1.59	5.36	1.76
I can talk about my personal problems with my friends	1045	4.56	1.93	4.38	1.93	4.69	1.93
My teacher(s) support and encourage me	1045	5.03	1.77	4.97	1.79	5.07	1.75
I can talk to my teacher(s) when I have personal problems	1045	3.99	2.01	3.97	2.01	4.00	2.01
I feel that my teachers understand me	1045	4.16	1.90	4.17	1.85	4.15	1.93
In my community, there are people who support me	1045	4.01	1.89	4.07	1.88	3.97	1.90
People in my community can relate to and understand my home circumstances	1045	3.92	1.93	3.99	1.90	3.87	1.95
I can count on my community when things go wrong	1045	3.37	1.98	3.49	1.999	3.28	1.97
<b>MSPSS Total</b>	<b>1045</b>	<b>4.85</b>	<b>1.05</b>	<b>4.80</b>	<b>1.03</b>	<b>4.89</b>	<b>1.06</b>

\*on a 7-point agreement scale

The skewness of the items on the SLSS ranged from -.467 to -.1, with kurtosis from -.906 to -.341. For the MSPSS items, skewness ranged from -1.345 to -.361, with kurtosis from -

1.168 to .860. The skewness of the items for Career Aspirations ranged from -3.072 to -1.131 with kurtosis from 4.409 to 9.413. These departures from normality were attended to using the bootstrap method (500 samples) as implemented in the AMOS software (version 25).

### **Confirmatory Factor Analysis**

SEM usually proceeds with the testing of the measurement models using CFA. The measurement models for the SLSS and the CAS are presented below (See Models 1 – 3 in Table 4). The scores on the MSPSS were summed to create a total MSPSS (observed) score; this score, on a continuous scale, was used as the mediator variable in the SEM. Model fit for the CFA models was improved with the consideration of modification indices where error covariances were included on items that presented with high parameter associations. Thereafter, these items with high correlations ( $r > .3$ ) were inspected. Where the items appeared to have a reasonable content overlap, it was speculated that the participants were interpreting the items in a similar way. Model fit was improved through the trial and error deletion of one of the items that presented with high correlations. Finally, as per the recommendation of Kline (2011), items with low factor loadings ( $< .2$ ) were deleted. The deletion of any items was only actioned if it resulted in the CFI of the model improving by more than .01 (Jiang & Huebner, 2018). The initial model for the SLSS presented with an inadequate fit that improved substantially with the deletion of two items (Item 4: “I have what I want in life” and Item 5: “My life is better than most others my age”) (see Model 2 in Table 4).

Table 4

*Fit indexes for confirmatory factor models and structural equation models*

<b>Model</b>	<b>Chi-square</b>	<b>df</b>	<b>p-value</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>
1. Initial SLSS	183.458	9	.000	.954	.136 (.119-.154)	.0409
2. Modified SLSS	5.004	2	.080	.999	.038 (.000-.081)	.0072
3. Initial Career Aspirations	12.101	2	.002	.991	.041 (.038-.087)	.0222
4. SEM_SLSS_CAS	25.634	13	.019	.996	.031 (.012-.048)	.0270
5. SEM_SLSS_CAS (Configural)	44.549	26	.013	.994	.026 (.012-.039)	.0453
6. SEM_SLSS_CAS (Metric)	48.394	31	.024	.995	.023 (.009-.035)	.0460
7. SEM_SLSS_CAS (Scalar)	73.258	36	.000	.989	.032 (.021-.042)	.0461
8. SEM_SLSS-CAS (Mediated MSPSS)	35.436	18	.008	.995	.031 (.015-.045)	.0274
9. SEM_SLSS-CAS (Mediated MSPSS) (Configural)	62.262	36	.004	.992	.026 (.015-.037)	.0459
10. SEM_SLSS-CAS (Mediated MSPSS) (Metric)	66.002	42	.010	.993	.023 .012-.034	.0467
11. SEM_SLSS-CAS (Mediated MSPSS) (Scalar)	91.760	48	.000	.987	.030 (.020-.039)	.0466
12. SEM_SLSS-CAS Mediated MSPSS Scalar (Age)	114.816	60	.000	.984	.030 (.021-.038)	.0442

## Structural Equation Modelling (Overall Model)

In the first structural model (using the pooled sample) the relation between subjective well-being (SLSS) and CAS was assessed. For the pooled sample an appropriate fit was obtained (see Model 6 in Table 4). However, the standardised regression weight evinced a non-significant relation between subjective well-being and aspirations ( $\beta = .03$ ;  $p = .512$ ) (see Figure 1).

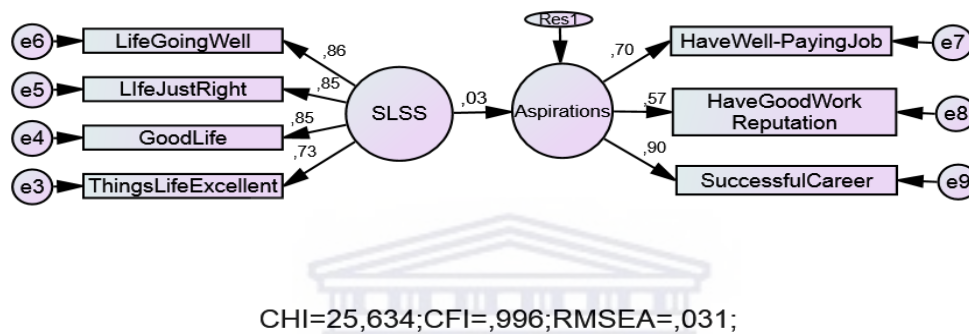


Figure 1. Overall model with pooled sample.

## Multi-group analysis

Thereafter, MGSEM was conducted to assess the differences between males and females. This was achieved through the assessment of measurement invariance, the extent to which items in the scale have the same meaning between groups (Meredith, 1993). If measurement invariance is not met, then group comparisons on the measured variables would have ambiguous and unreliable interpretations (Millsap & Olivera-Aguilar, 2012). Measurement invariance is generally conceptualised on a hierarchical structure assessed through the application of incrementally restrictive constraints. In the current study measurement invariance of multi-group models were tested in three steps. In the first step, *configural* factor invariance, which assesses an unconstrained multi-group model wherein the parameters are freely estimated, was tested.

Thereafter, *metric* factor invariance, which is a precondition for comparing covariance, correlations or regression coefficients, was tested by constraining the factor loadings of the baseline model. Finally, *scalar* factor invariance, which is a precondition for comparing means between groups, was tested by constraining the factor loadings and intercepts. Each subsequent model is tenable if the fit indexes do not decrease by more than .010 on the CFI (Cheung & Rensvold, 2002), by .015 on the RMSEA and by .010 on the SRMR (Chen, 2007).

In the current study configural, metric and scalar invariance was tenable, indicating that the groups (males and females) can be meaningfully compared across correlations, regressions and means (see Models 7-9). More specifically, the results demonstrate a significant relation between SWB and career aspirations for the males ( $\beta = .14, p = .027$ ; see Figure 2) accounting for 2.1% of the variation in Aspirations (see Table 5). However, a non-significant result was obtained for females ( $\beta = .05, p = .298$ ).

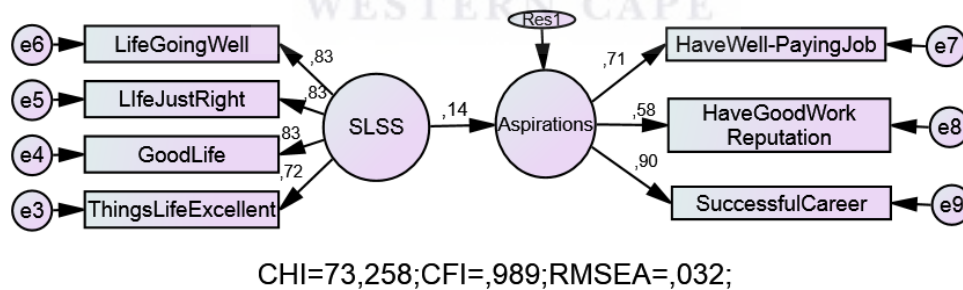


Figure 2. Structural equation model constrained loadings and intercepts (Males).

Table 5

Standardized Regression Weights: (Gender – Measurement intercepts)

Parameter	Estimate	Males		Females		
		Lower	Upper	Estimate	Lower	Upper
Aspirations <--- SLSS	,141*	,011	,265	-,049 <sup>ns</sup>	-,133	,044
SLSS6 <--- SLSS	,717	,660	,775	,743	,694	,791
SLSS3 <--- SLSS	,835	,775	,886	,858	,814	,894
SLSS2 <--- SLSS	,827	,777	,875	,861	,822	,894
SLSS1 <--- SLSS	,833	,792	,876	,879	,849	,912
Aspir1 <--- Aspirations	,711	,617	,795	,679	,571	,753
Aspir2 <--- Aspirations	,581	,485	,658	,567	,471	,642
Aspir3 <--- Aspirations	,901	,823	,969	,901	,822	,963

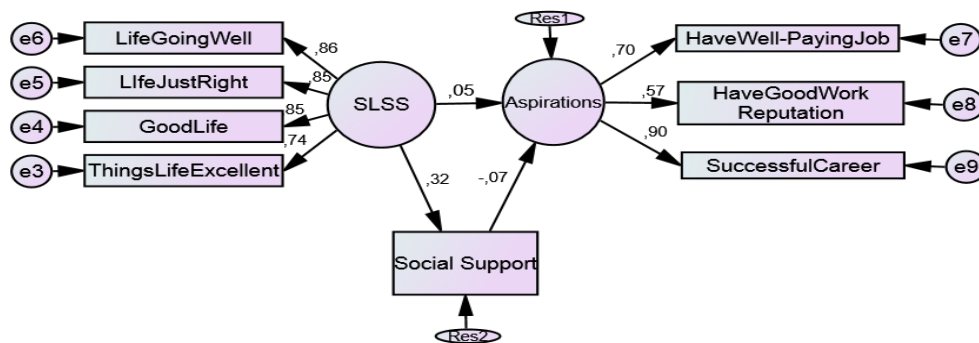
\*Significant at <.05;

<sup>ns</sup> = Not significant;

All other values significant at <.001

### Mediation analysis

The variable ‘social support’ was included as a mediator in the SEM. While an adequate fit was obtained, the results indicate that social support did not mediate the relation between SWB and aspirations using the pooled sample (direct effect:  $\beta = -.024 - .128$ ;  $p > .05$ ; indirect effect:  $\beta = -.050 - .112$ ;  $p > .05$ ; total effect:  $\beta = -.050 - .112$ ;  $p > .05$ ) (see Figure 3).



CHI=35,436;CFI=,995;RMSEA=,030;

Figure 3. Overall Structural equation model (mediation).



Thereafter, MGSEM was conducted across gender (see Models 9 - 11 in Table 4). The results (constrained loadings and intercepts) show a significant relation between SWB and aspirations for males: direct effect: ( $\beta = .016 - .267$ ;  $p < .05$ ); indirect effect: ( $\beta = .00 - .030$ ;  $p > .05$ ); total effect: ( $\beta = .011 - .268$ ;  $p < .05$ ). However, given that the indirect effect was non-significant, social support did not mediate the relation between SWB and aspirations. For females, the direct ( $\beta = -.093 - .077$ ;  $p > .05$ ), indirect ( $\beta = -.072 - .002$ ;  $p > .05$ ) and total effects ( $\beta = -.132 - .046$ ;  $p > .05$ ) were not significant. However, it is important to note that for females there is a significant negative relation between social support and aspirations ( $\beta = -.005 - -.210$ ;  $p < .05$ ).

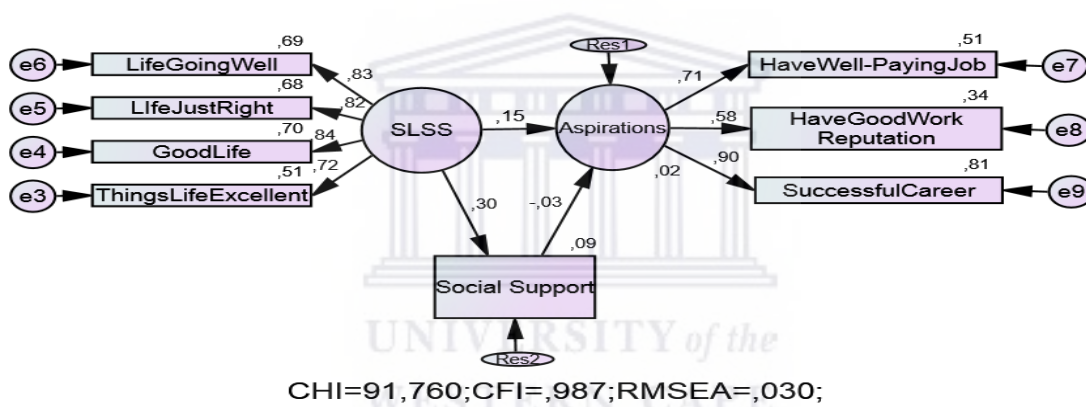


Figure 4. Standardised regression weights: scalar estimates (mediation) males.

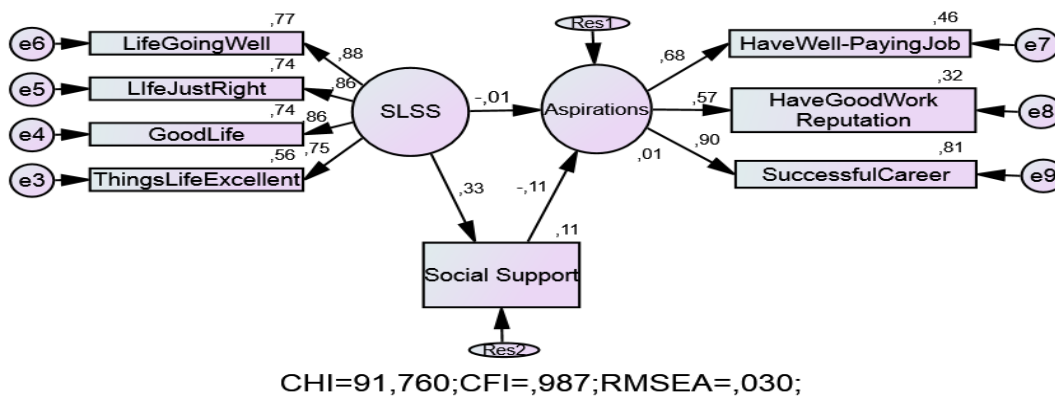


Figure 5. Standardised regression weights: scalar estimates (mediation) females.

Table 6

Standardised regression weights: Mediation Model (Gender – Measurement intercepts)

Parameter	Estimate	Males		Females		
		Lower	Upper	Lower	Upper	
SSupport <--- SLSS	,297	,226	,369	,334	,259	,411
Aspirations <--- SLSS	,149*	,016	,267	-,012 <sup>ns</sup>	-,093	,077
Aspirations <--- SSupport	-,028 <sup>ns</sup>	-,150	,101	-,106 <sup>ns</sup>	-,210	,005
SLSS6 <--- SLSS	,717	,660	,776	,746	,697	,793
SLSS3 <--- SLSS	,837	,779	,890	,859	,817	,895
SLSS2 <--- SLSS	,823	,771	,872	,860	,822	,894
SLSS1 <--- SLSS	,833	,792	,874	,879	,844	,913
Aspir1 <--- Aspirations	,711	,616	,798	,678	,572	,753
Aspir2 <--- Aspirations	,580	,484	,658	,566	,470	,640
Aspir3 <--- Aspirations	,902	,824	,968	,903	,822	,964

\*Significant at <.01

<sup>ns</sup> = Not significant

All other values significant at <.001

Further analysis included the addition of age as an observed variable in the model, regressed onto the ‘aspirations’ latent variable. The results reveal a significant negative correlation between age and aspirations for both males ( $r = -.226, p < .05$ ) and females ( $r = -.101, p < .05$ ) (see Figures 5 and 6).

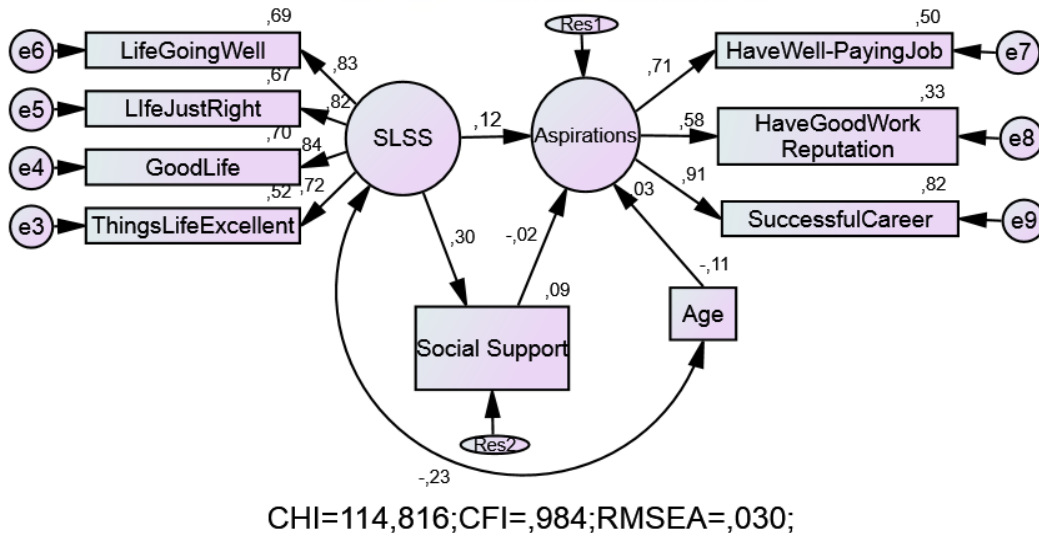
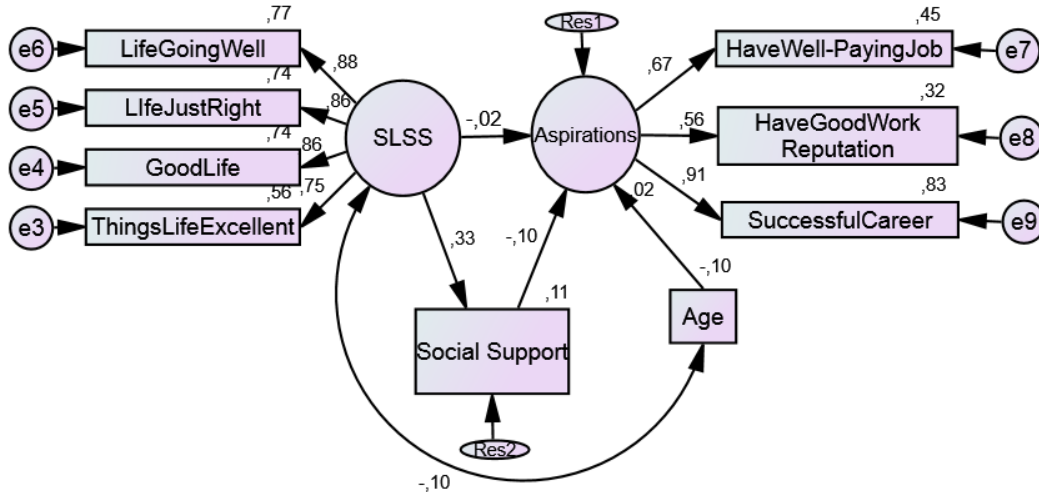


Figure 6. Standardised regression weights scalar estimates (males) by age.



CHI=114,816;CFI=,984;RMSEA=,030;

Figure 7. Standardised regression weights scalar estimates (females) by age.

## Discussion

The overarching aim of this study was to explore the relation between adolescents' SWB and career aspirations. More specifically, the study aimed to ascertain the extent to which the relation between SWB and career aspirations is mediated by social support. Finally, the study aimed to determine the extent to which gender and age influenced this overall relation.

Contrary to previous studies, the current study found a non-significant relation between adolescents' SWB and career aspirations for the overall pooled sample. This result is surprising given the well-established association reported in previous studies (Davids et al., 2017; Eryilmaz, 2011). However, MGSEM revealed a difference across gender, with a significant relation found for males. These results resonate with previous studies that found differences in levels of aspirations across gender (Gutman & Schoon, 2012; Howard et al., 2011; Mau & Bikos, 2000; Meece et al., 2014; Patton & Creed, 2007). Traditional gender roles and the socialisation

process in South African society could also provide a plausible explanation for this finding, where the roles of males are to provide for their wives; while females are socialised to fulfil traditional roles of housekeeper and mother (Hutson, 2007).

The results of the current study are similarly surprising with the consideration of social support as a mediator between SWB and aspirations. The results demonstrate that social support did not mediate the relation between SWB and aspirations for males or females. For males, while a significant relation was found to exist between SWB and social support, there was a non-significant relation between social support and aspirations. Given that the indirect effect was non-significant, it was concluded that social support did not mediate the relation between SWB and aspirations. A similar trend was noted with females; however, the results revealed a significant negative relation between social support and aspirations. This means that the type and extent of the social support that the female participants are receiving are contributing to lower levels of aspirations. This could point to the influence of gender roles and the socialisation of females. In this instance, the evidence suggests that support systems are either passively constraining aspirations or actively discouraging females from aspiring to achieve in their careers. Qualitative research conducted by Savahl (2010) in the Western Cape found that adolescent girls residing in low-income communities have less hope for the future and lower levels of aspirations, epitomised in the contention that their only trajectory was 'to fall pregnant'. The study further revealed that the constrained social context wherein the participants resided was a substantial contributor to the feelings of hopelessness toward the future. The participants further argued that there was a lack of adult role models to inspire them and to create opportunities for them to be successful in their careers (Savahl, 2010). In other developing

contexts, empirical research has demonstrated a stronger parental preference for males to complete high school over their female counterparts (see Stash & Hannum, 2001; Zhang, Kao, & Hannum, 2007). This preference may be attributed to parents ascribing to traditional gender roles. Alat and Alat (2011), for example, found that parents viewed education for girls as an impediment to traditional household duties, instead preferring their investment in religious education and early marriage. The findings from the current study appear to support these contentions. It is likely that the foregrounding of traditional gender roles and cultural beliefs of females' position in society in general, and the household in particular, have tainted the nature of social support that they receive. That is, importantly, social support does not always present as a positive construct. In the current study social support could be construed as performative act of socialisation, based on gender roles and cultural beliefs. Therefore, the extent or intensity of social support is incidental, given that adolescents could be recipients of high levels of social support and yet show lower levels of aspirations. Gender roles and cultural values could potentially shape the nature and type of social support that the female participants receive and ultimately impact on their level of aspirations. In contrast in developed countries, parents have higher occupational aspirations for their daughters than sons (Ashby & Schoon, 2010; Gutman & Schoon, 2012; Meece et al., 2014).

An interesting finding of the current study was the low SWB scores among adolescents. The item mean scores and the overall score of 62.02 (on a 100-point scale) is substantially lower than is usually reported in adolescent samples (Casas, Băltătescu, Bertran, González, & Hatos, 2013). The overall score also falls below the threshold at which homeostasis is set to function (+/- 76) (Cummins, 2014) suggesting that either homeostasis has been breached, or that the

buffers are functioning at maximum capacity. It is this potential breach of homeostasis which could be affecting the relation between SWB and aspirations. One of the key buffers, social support, is likely imbued with ideological configurations of gender roles which are further affecting the relations. González-Carrasco and Casas (2017) further suggest that during adolescence HPMood is subject to restructuring, owing to normal developmental processes that could potentially lead to lower levels of SWB. It is likely that this ‘restructuring’ is similarly influencing the relation between SWB and aspirations (Patton & Creed, 2007; Sheldrake, 2018). Confounding the issue of low SWB scores among adolescents is the lack of financial or economic resources, an additional external buffer. As Cummins (2014, p. 639) explains:

“The true power of wealth is to protect well-being through its use as a highly flexible resource that allows people to defend themselves against the negative potential inherent within their environment... people that experience socioeconomic and contextual constraints, must yield to their circumstances to a much greater degree...therefore, they are far more at the mercy of their environment, leading to lower levels of SWB”.

Given that the participants in the current study are from low SES communities, the potential buffering role of economic advantage may be non-functional. The two external buffers of social support and economic resources are generally understood to function in an additive capacity in maintaining the homeostatic set-point of SWB (Cummins, 2010). While the additive buffering contribution should be positive, in the current study it appears to be functioning inversely, as a stressor challenging the homeostatic system. As SWB homeostasis theory also identifies genetically programmed internal buffers that function to protect the homeostatic

system, it also involves the automatic processes of adaptation and habituation (Cummins, 2010). Cummins (2010) proposes that one of the mechanisms through which these internal buffers operate is cognitive processes that functions to restructure how events are perceived and interpreted. The internal buffers are also linked directly to the individual's level of self-esteem, purpose, and meaning in life. Noting the social and contextual realities of the participants in the current study, it is likely that these internal buffers are similarly compromised, given the historical context of social exclusion and economic marginalisation that has resulted in intergenerational oppression. This intergenerational oppression negatively affects the psychosocial functioning and well-being of individuals across generations. Qualitative research conducted on the psychosocial well-being of adolescents residing in low-income communities in Cape Town has shown that it is related to low levels of self-esteem, self-concept, and self-worth (Benninger & Savahl, 2017; Savahl, September, Odendaal & Moos, 2008; Savahl & Malcolm et al., 2015). Taken together, a plausible interpretation of the results of the current study is that the internal and external buffers that are generally regarded as a means of protecting the SWB set-point are compromised, leading to lower levels of SWB. It is likely that this same mechanism is interacting in terms of the relation between SWB and aspirations.

The inclusion of age into the model suggests that as the adolescents get older, their levels of aspirations decrease, which is in line with previous research (see Patton & Creed, 2007; Sheldrake, 2018). A similar trend is noted with SWB, which is referred to as the 'subjective well-being decreasing-with-age tendency' in the literature (González-Carrasco & Casas, 2017). In South Africa, this trend is further exemplified given both the macro-context of high levels of poverty and youth unemployment, exacerbated by cultural values and practices that create a



stronger realisation and awareness of the limited resources and access to opportunities (Adams, Savahl, Florence, & Jackson, 2019). Making sense of these constrained contextual realities is a likely mechanism through which SWB is compromised.

### **Conclusion, limitations, and recommendations**

Given the findings of the study, it is evident that social support and financial resources are essential factors to consider in relation to adolescents' well-being and aspirations. More specifically, the social support that girls receive is informed by gender norms and cultural beliefs that in turn negatively affect female adolescents' aspirations. As such, programmes should be targeted at challenging gender roles, and inspiring and creating educational opportunities for females, to prepare them to meaningfully enter the workforce. There also needs to be a strong focus on life skills and providing information to young people about educational and career opportunities. Interventions should be targeted at institutions, include a focus on improving parenting skills, and incorporate ways to advance adolescents' career aspirations. Essentially, it is not only about inspiring at an individual level but providing information and creating career opportunities for adolescents.

The current study only examined a one-way direction between SWB and aspirations. For this reason, a hypothesised reciprocal relation between these variables should be explored. Regarding the inclusion of age, further interrogation of this variable is required perhaps by means of a multi-group model. Given South Africa's socio-political history, it would be useful to test for variations across different SES groups. A limitation of the study is that it only made use of a sub-scale of a larger life aspirations scale for young people comprising only three items that assess career aspirations. It is thus important that future research utilises a scale that specifically



focuses on the assessment of career aspirations. Further, the current study used the context-free SLSS to assess SWB. It is, therefore, recommended that a scale be used that is inclusive of context-free, domain-specific, and affective items, as demonstrated in Savahl, Casas et al.'s (2019) quadripartite model of SWB.

It is noteworthy that the influence of affect is lacking in the 'aspirations' literature, and that this focus may provide further understandings of the nature of aspirations. In terms of social support, the current study limited its focus to levels of social support. It is recommended that future research explores the nature and types of social support adolescents are receiving, as well as who provides support. Given that most studies on adolescent aspirations are quantitative in nature, it is also recommended that qualitative research is undertaken to provide a more comprehensive understanding of the dynamics of the relation between SWB and aspirations, particularly in terms of the role of the aforementioned forms of social support within low-resourced settings. Qualitative research may also provide opportunities for more in-depth interrogation of the role of culture and traditional practices. It is acknowledged that the study did not explore the distinction between intrinsic and extrinsic aspirations. Qualitative research would, therefore, allow for a more in-depth exploration of the nature of the tension between the internal psychological and external contextual factors influencing adolescents' aspirations. Finally, as Casas (2016) argues, we are faced with the challenge of addressing the large information gap relating to the younger population's point of view with regards to their social realities. It is therefore essential that we move the focus from adult opinions of child and adolescent well-being, towards acknowledging the perceptions, evaluations, and aspirations of children and adolescents.

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## Appendix A

### Students' Life Satisfaction Scale

1. Here are 7 sentences about your life. Please tick a box to say how much you agree with each of the sentences.

	0= <span style="float: right;">10=</span> Not at <span style="float: right;">Very much</span> all agree <span style="float: right;">agree</span>										
	0	1	2	3	4	5	6	7	8	9	10
• My life is going well.	0	1	2	3	4	5	6	7	8	9	10
• My life is just right.	0	1	2	3	4	5	6	7	8	9	10
• I have a good life.	0	1	2	3	4	5	6	7	8	9	10
• I have what I want in life.	0	1	2	3	4	5	6	7	8	9	10
• My life is better than most others my age	0	1	2	3	4	5	6	7	8	9	10
• The things in my life are excellent	0	1	2	3	4	5	6	7	8	9	10
• It is important for me to be able to make my own decisions about things in my life	0	1	2	3	4	5	6	7	8	9	10

### Your Expectations and Aspirations

6.1 How IMPORTANT is it for you...

	Very important	Important	Not very important	Not important at all
• To have a well-paying job when you start working?	1	2	3	4
• To have a good reputation in the community?	1	2	3	4
• To work hard and be successful?	1	2	3	4
• To save money for the future?	1	2	3	4
• To be careful about how much money you spend?	1	2	3	4
• To have a happy family life?	1	2	3	4

**Perceived social support**

**8. We are interested in how you feel about the following statements. Read each statement carefully and indicate how you feel about each statement.**

	<b>Very strongly disagree</b>	<b>Strongly disagree</b>	<b>Mildly disagree</b>	<b>Neutral</b>	<b>Mildly agree</b>	<b>Strongly agree</b>	<b>Very strongly agree</b>
• There is a special person who is around when I need them.	1	2	3	4	5	6	7
• There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
• My family tries to help me.	1	2	3	4	5	6	7
• I get the emotional help and support I need from my family	1	2	3	4	5	6	7
• I have a special person who is a source of comfort to me.	1	2	3	4	5	6	7
• My friends try to help me.	1	2	3	4	5	6	7
• I can count on my friends when things go wrong.	1	2	3	4	5	6	7
• I can talk about my personal problems with my family.	1	2	3	4	5	6	7
• I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
• There is a special person in my life that cares about my feelings.	1	2	3	4	5	6	7
• My family is willing to help me make decisions.	1	2	3	4	5	6	7
• I can talk about my personal problems with my friends.	1	2	3	4	5	6	7
• My teacher(s) support and encourage me.	1	2	3	4	5	6	7
• I can talk to my teacher(s) when I have personal problems	1	2	3	4	5	6	7
• I feel that my teacher(s) understand me.	1	2	3	4	5	6	7
• In my community, there are people who support me.	1	2	3	4	5	6	7
• People in my community can relate to and understand my home circumstances.	1	2	3	4	5	6	7
• I can count on my community when things go wrong.	1	2	3	4	5	6	7

## Appendix B



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## DEPARTMENT OF PSYCHOLOGY

Private Bag X 17, Bellville 7535, South Africa, Telephone: (021) 959-2283

**Chairperson**

**CHSHD**

**Dear Professor Smith**

**03/07/2017**

**Permission: Donnay Manual**

Ms Donnay Manual is a registered student in the M.A Research Psychology programme. She has submitted her proposal in fulfillment of the mini-thesis component of the degree. Her thesis forms part of a UWC project registered in 2013 (“Factors that influence aspirations among adolescents in a low-income community in the Cape Flats”, 13/5/20).

As the principal investigator, I hereby grant her permission to access and use the data collected for the above project as part of her mini-thesis.

**Regards**

A handwritten signature in black ink, appearing to read 'S. Savahl'.

**S. Savahl**

**Principal Investigator**

**Supervisor**

**Department of Psychology**

**University of the Western Cape**



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