

https://dspace.org/

The exploration of self-perception in the educational attainment of high achieving students from a low socioeconomic background in South African

Sebele, Phemelo Berveley

2023-06

University of the Witwatersrand, Johannesburg

https://hdl.handle.net/10539/40105

Sebele, Phemelo Berveley. (2023). The exploration of self-perception in the educational attainment of high achieving students from a low socioeconomic background in South African. [Master's dissertation, University of the Witwatersrand, Johannesburg]. https://hdl.handle.net/10539/40105

Downloaded from a DSpace repository. https://dspace.org/

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
PSYCHOLOGY

The exploration of self-perception in the educational attainment of high achieving students from a low socioeconomic background in South African.

BY

Phemelo Berveley Sebele.

Student number: 2620863.

A Research Report

Submitted in partial fulfilment of the requirements for the Degree of Master of Arts in Psychology by Coursework and Research Report in the Department of Psychology, School of Human and Community Development, Faculty of Humanities at the University of the Witwatersrand, Johannesburg.

Supervised by Dr. Sahba Besharati.

Submitted on: 14 March 2023.

Word count: 22 618.

Masters in Social and Psychological Research – Research Proposal Declaration

Surname: Sebele

First name/s: Phemelo Berveley

Student no.: 2620863

Supervisor: Dr. Sahba Besharati

Title: The exploration of self-perception in the educational attainment of high achieving students from a low socioeconomic background in South African.

Declaration

I, Phemelo Sebele, know and accept that plagiarism (i.e., to use another's work and to pretend that it is one's own) is wrong. Consequently, I declare that

- The research proposal is my own work.
- I understand what plagiarism is, and the importance of clearly and appropriately acknowledging my sources.
- I understand that questions about plagiarism can arise in any piece of work I submit, regardless of whether that work is to be formally assessed or not.

- I understand that a proper paraphrase or summary of ideas/ content from a particular source should be written in my own words with my own sentence structure, and be accompanied by an appropriate reference.
- I have correctly acknowledged all direct quotations and paraphrased ideas/ content by way of appropriate, APA-style in-text references.
- I have provided a complete, alphabetized reference list, as required by the APA method of referencing.
- I understand that anti-plagiarism software (e.g., Turnitin) is a useful resource but that such software does not provide definitive proof that a document is free of plagiarism.
- I have not allowed, and will not allow, anyone, to copy my work with the intention of passing it off as his or her own work.
- I am aware of and familiar with the University of the Witwatersrand's policy on plagiarism.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I failed to acknowledge the source of the ideas or words in my writing.

Signature: *SebeleP.B*.

Date: 14 March 2023.

Abstract

Background: The achievement gap between students' from lower-and-higher socioeconomic backgrounds is a global challenge that continues to widen. Education inequalities persist more widely with students from low socioeconomic backgrounds who are more likely to drop out of compulsory high school. However, individual characteristic such as resilience, growth-mind and positive self-concept – though largely studied using survey based methods - have been found to lessen the achievement gap. Yet, the influence of such psychological factors, specifically, self-perception as an overarching concept, is poorly understood, especially in low-to-middle income contexts like South Africa.

Aim: This study aimed to understand the lived experiences and processes involved in self-perception of high-achieving first year university students from a low-socio-economic background in the low-to-middle income context of South Africa.

Methods: An ecological systems theory and phenomenological approach guided this study. Semi-structured interviews, incorporating retrospective (high school) and current (university) questions, were conducted with 12 first-year university students.

Findings: The research demonstrated that the lived experiences of self-perception in high achieving students' that come from a low SES background are both individualised and similar. The findings revealed that validation which was distributed between internal (self-belief) and external (affirmations from external sources) played a significant role in the students' academic success. Furthermore, the data also demonstrated that the perception of intelligence is largely influenced by what the students' observe from their different environments.

Conclusion: This study adds to our understanding of the role of self-perception in educational inequality which can be used in future school-based, family and wider policy interventions. It further demonstrates the need to understand these complex relationships by drawing on lived experience of students using qualitative approaches.

Keywords: Self-perception, low-to-middle income country, academic achievement, socio-economic status, education inequality

Table of Contents

Acknowledgements	6
Chapter 1: Context of the study	7
1.1 Introduction and background	7
1.2 Study Rationale and Research Aims	10
1.3 Outline for the research report	11
Chapter 2: Literature review	11
2.2 The educational inequality in South Africa	13
2.3 Self-perception	15
2.4 Resilience, growth mindset and grit	17
2.5 Theoretical Framework: Ecological systems theory	19
Chapter 3: Methodology	20
3.1 Research question and study design	21
3.2 Participants and sampling technique	22
3.3 Instruments	22
3.4 Procedure	23
3.5 Data analysis	23
3.6 Trustworthiness	24
3.7 Ethical considerations	25
3.8 Reflexivity	25
Chapter 4: Findings	26
4.1 Participant demographic	26
4.2 General themes identified	28
4.2.1 Validation	29
4.2.2 Socialisation	32
4.3 Identified themes specific to self-perception constructs	35
4.3.1 Academic self-perception	36
4.3.2 Self-efficacy	42

4.3.3 Growth mindset 50
4.3.4 Fear of failure 54
4.3.5 Sense of belonging 57
Chapter 5: Discussion and conclusion 61
Discussion 61
5.1 Implication of the study 67
5.2 Limitations 67
5.3 Reflexivity 68
5.4 Conclusion 69
References 70
APPENDICES 82

Acknowledgements

Firstly, I would like to thank God – The Most High, the one who began the good work in me and carried it to its completion (Philippians 1 verse 6).

It would not have been possible to see this study project to its completion if it was not for the constant support, help and prayers of a number of people. I would like to thank them and their contribution. All your efforts throughout this journey are highly appreciated and were acknowledged.

Nonetheless, I would like to sincerely express my gratitude to my mother, Reneilwe Sebele, and my father, William Sebele, for the constant words of affirmations, encouraging me to further my studies and for always reminding me that the best way to empower myself is through education and for your prayers and to my sisters, Boikanyego and Motheo Sebele, for inspiring me to always thrive for the best and be the best.

I would also like to thank my supervisor, Dr. Sahba Besharati for the support with the research project and your willingness to providing direction and imparting new knowledge and most importantly, thank you for believing in me when I did not believe in myself. I would also like to thank the Wits first year students who participated in this study and shared their vulnerable experiences of their background and their perception of self.

To my Grandmother, Thank you for you constant prayers and finally, to my friend, thank for your unwavering support.

Chapter 1: Context of the study

1.1 Introduction and background

Education arguably lies at the foundation of every country. It consequently has a large impact on various aspects of the economy (Barro, 2013). According to Agasisti & Longobardi (2017) despite this need, a host of studies across numerous countries and contexts have found continued education inequalities in both high- and-low-income countries strongly related to socioeconomic disparities. However, these education inequalities are far more pronounced in the context of low-to-middle income countries (LMIC), which further impede economic and social progress (Paulus et al., 2021; von Stumm, 2017).

Nevertheless, with the continued effects of globalisation and international economic agreement like the GATS (Global Agreement on Trade in Services), the push for equality and increase in higher education enrolment has become a key priority for many LMIC's, such as India, Kenya, Malaysia, China and South Africa amongst others (Suresh & Kumaravelu, 2017). Suresh and Kumaravelu further explain that higher education is required as a result of economic expansion. The job market requires knowledgeable workers, necessitating the need for high-quality education, additionally, parents in LMIC's want their children to have better prospects, which they believe can only be achieved through education.

Psychological factors such as self-concept and self-efficacy are undoubtedly the two most well-researched self-constructs in academic motivation studies thus far (Bong & Clark, 1999). Self-concept and self-efficacy have demonstrated various results, such as students' problematic psychological behaviours negatively affected their academic achievement (Wang & Neihart, 2015). Furthermore, Bong & Clark further explains that individuals with negative self-conceptions appear to fail to reach their optimum potential and prove inadequate to their expected performance in light of their objective capacity. Nonetheless, other studies (Bandura, 1997; Schunk, 2005) have shown that a students beliefs in his/her efficacy to adjust their own learning activities and understand a difficult subject can affect their academic achievements.

Consequently, studies have converged to find that a students socioeconomic background can have an impact on their self-perception (Heverle & Carter, 2015) However, there is a lack of research directly investigating how self-perception as a psychological construct impacts

academic achievement in the context of socio-economic adversity. This study is embedded within a larger study investigating if self-perception serves as a mechanism of achievement inequality using data from the Programme for International Students Assessment (PISA) survey. Following the methodology from this wider study that quantitatively investigated the relationship between SES background, children's self-perception and academic performance (see Hofer et al., 2023), five self-perception variables were identified from the PISA survey 2018 (https://www.oecd.org/pisa/data/2018database/). Therefore, the five perception constructs used for this study are: (1) academic self-perception; (2) self-efficacy; (3) growth mindset; (4) fear of failure; and (5) sense of belonging.

According to Shavel & Staton (1976) academic self-perception is the acknowledgement and perception that students have about their ability to achieve. Villegas et al. (2013) further explain that academic self-perception is fundamental in academics due to the crucial role that it plays on learning and cognitive functioning, thus, the self-perception that students' have of themselves is important for achievement and according to Arnaud and colleagues (2007) self-perception about competencies has a direct link on decisions made to further studies. Arnaud et al. (2007) further explains that the decision on what field of study to go into, the university to enroll at and the chances of being able to obtain the degree are impacted by the perception of academic competences.

McKeever (2017) stipulates that there are certain characteristics that students' have that are an indicator of academic success specifically self-system processes. Self-system processes are defined as the dynamic network of self-related cognitions, motivations and academic performance. A host of studies have shown that there is a distinct difference between students' with high academic self-perception and students' with low academic perception (Villegas et al, 2013). According to Bong & Skaalvik (2013) students' with high academic self-concept are able to accept challenges, try new things, take risks and trust their own abilities, whereas students' with a low academic self-concept have less confidence in their academic abilities, avoid situations that cause anxiety and do not value their talents.

Therefore both, internal and external factors can determine how students' perceive their academic abilities. For instance, McKeever (2017) reported that students' from urban areas perception of the self is better than the perception of students' from rural areas. According to

Dramanu & Balarabe, (2013) motivation results in the students' ability to be competent academically Additionally, McKeever (2017) asserts that confidence is one of the characteristics that was found to be prevalent in students' with high academic self-perception.

Therefore, this study aimed to acquire an in-depth understanding of the lived experiences of first-year university students' from a low socioeconomic background to explore the influence of self-perception on academic achievement. University students' were chosen as they can be considered as a population of high-achieving students coming from high-school, and first-year students, as they are recent high school graduates and have a more recent recollection of experiences before tertiary education. The economic and educational inequality in a LMIC such as South Africa are very prevalent, thus, making South Africa a unique context to explore experiences of self-perception and academic achievement.

1.2 Study Rationale and Research Aims

How children and adolescence perceive themselves can either be a disadvantage or alternatively a motivation in their academic engagement. A host of studies suggest that children from a lower SES background are more likely to drop-out of compulsory high-school education, resulting in them not continuing with tertiary education. Furthermore, several studies have investigated the possible role of psychological concepts of self-concept and self-efficacy in relation to education inequality (Wang & Neihart, 2015), but mostly using descriptive quantitative methods. Others, such as Hochanadel & Finamore (2015) and Mampane & Bouwer (2011) have looked at self-perception in relation to associated concepts such as resilience, growth-mindset and grit. However, few of these studies have been conducted in LMIC's, with varying context, like South Africa. To the best of my knowledge, only one survey-based study (Ochse, 2003) has looked at self-perception and education utilising purely descriptive survey methodology. Studies that used in-depth, qualitative approaches to explore and document lived experiences of students' educational attainment in relation to their self-perception are not yet recorded. Thus, there is a need to explore this study globally, but also in the LMIC contexts, like South Africa.

As mentioned above, this study forms part of a larger project investigating socioeconomic disparities in education through the lens of children's self-perception. Within this larger study, an exploratory quantitative study (Hofer et al., 2023) has been conducted using a large cross-cultural and cross-sectional data base coming from the Program for International Student Assessment (PISA) as part of the OECD (Organisation for Economic Co-operation and Development; Adams et al., 2002). PISA uses large scale survey-based methodology across more than 70 countries that has engaged more than three million students worldwide to assess 15-year-old reading, mathematics and science knowledge and skills to meet real life challenges. Although there are countries represented from LMIC's (e.g. Brazil) in the PISA database, there are at present no countries from Africa included. Furthermore, the PISA data only includes quantitative and survey-based data that is informative on many accounts, but also excludes an understanding of the mechanisms behind student performance and the experiences of the adolescents in the schooling, family and wider social systems. Therefore, to compliment and to offer greater clarity on the psychological reasons behind academic performance – such as self-perception – complimentary qualitative studies are needed to explore the lived experiences of students' school experiences. Therefore, the main aim of this study is to explore the lived experiences and how self-perception of high-achieving students from a low SES background influence educational attainment in the LMIC context of South Africa.

1.3 Outline for the research report

The context of this study, as well as the study's rationale and aims, are described here in Chapter one. A detailed literature review is outlined in Chapter two in addition to this study's theoretical framework. The research question, design and methodology are outlined in Chapter three. The study's findings are examined in the Fourth chapter. Lastly, the discussion, limitations and future perspectives of the research are all covered in-depth in Chapter five, together with comments on the conclusion.

Chapter 2: Literature review

2.1 An Overview of educational inequality

Research converges to suggest that socioeconomic inequalities intensifies the achievement gap in education independent of efforts to increase education standards, especially in the contexts of LMIC's (von Stumm, 2017). Reardon et al. (2013) for example explains that research continues to show how a strong relationship between lower socioeconomic position to lower academic attainment and slower rates of academic advancement when compared to higher socioeconomic status groups. According to the US Department of Education data (2014), the high school dropout rate among persons 16-24 years old was highest in low-income families (11.6%) compared to high-income families (2.8%) and it was also observed that children from low SES backgrounds have literacy skills that are five years behind those of higher SES background when they attend compulsory high-school.

In a study conducted by von Stumm (2017) for example, it was shown that there is a direct link between socioeconomic status and academic performance, which will be evident for learners as young as seven years old. However, the academic performance of children from higher socioeconomic backgrounds was already predetermined and was conjectured to increase as the learners grew older. To prove their hypothesis they conducted a study and initially recruited 15 000 families of twins born in England and Wales between 1994 and 1996. The twins were between the ages of 7 to 14 and teachers rated their achievement in English and mathematics, the parents' education and occupations were also recorded. They used different measures to measure intelligence for different age groups (ages 7 to 14 years), using a variation of verbal and visuospatial cognitive measures taken or adapted from the Wechsler Intelligence Scale for Children-III UK (WISC-III-UK ; 1992). Von Stumm (2017) showed that there is a strong positive correlation between children's academic achievement and cognitive ability, and SES index. The results of this study suggest that children from lower socioeconomic status

background experience greater difficulty achieving good grades and with performance on cognitive tests at school compared to those from a higher SES.

Moreover, the South African education system performs poorly along a number of dimensions. One being that schools that historically served children mainly from low SES backgrounds perform extremely poor, even in comparison to more economically "disadvantaged" African countries (van der Berg & Hofmeyr, 2018). According to Van der Berg & Hofmeyr (2018) the underlying concern is therefore that the learning that takes place in schools is highly unequal with respect to the SES of children and their racial group. Van der Berg & Hofmeyr further explains that inequalities in performance become evident as early as grade four, where it is already relatively clear which children have fallen so far behind that they would probably not be able to reach or pass matric with good enough grades to pursue studies at a higher learning institution. However, despite this strong relationship, there is still limited knowledge on other factors that are related to educational attainment in the context of low SES.

In looking at a case example of Kenya, a report of the Kenya National Bureau of Statistics (2017) the term "quality of education" refers to the quality of the compulsory education and higher learning institutions many functions, including research and community involvement. The report explains, using a public-sector survey which targeted government ministries, departments and agencies in Kenya to investigate continued education inequalities, that a variety of barriers can be identified that can be divided into three categories: (1) those related to resource constraints (financial allocation), (2) to how the system and individual institutions are run, and (3) those related to dominant teaching and learning approaches. In the 1980s, Kenya only had one higher education institution, the University of Nairobi, but it has grown fast since then, with overall enrolment increasing from 218 628 in 2011-2012 to 443 783 in 2014-2015, and to 564 507 in 2016-2017. Although these overarching quantitative increases are encouraging, the underlying reasons behind this increase in higher education intake are yet to be fully understood.

2.2 The educational inequality in South Africa

In South Africa, educational inequality is an even larger challenge due to its colonial and later apartheid history (Ndimande, 2016). Here, the hierarchical structure, including access to wealth was constructed to be on the basis of race over decades, therefore perpetuating the gap between

different population groups. Apartheid, which literally means “separation” in Afrikaans, was designed to divide South Africans based on race. Spaull (2013) argues that apartheid’s goal was short-lived, however its effects may still be seen in the face of South African society today. Apartheid established an extensive education divide between different population groups, and one gap that is evident today is access to higher-education. South Africa is a viable country to explore and investigate the educational attainment theory because much of the disparity observed there can be traced back to discriminatory policies like The Bantu Education Act of 1952. Its main objective was to ensure that individuals from different population groups acquire education that would constrain their academic potential (Wills, 2011). De Clercq (2020), describes this system of rules, which was finally completely repealed in 1994, as fairly explicit in enforcing distinct educational possibilities for residents based on their official racial classification, however the continued effects of these Apartheid strategies still resonate today. Educational disparity is significant because it regulates the majority of other forms of social inequality, both in the present and across time (McKeever, 2017).

De Wet et al (2009) explains that since the demise of apartheid, a large budget and considerable resources have been dedicated to rebalance education inequalities and opportunities in South Africa. This has resulted in South Africa having one of the most developed educational systems on the continent (Department of Basic Education, 2018). For example, in 2016 there were 25 574 compulsory schools in South Africa with 12 932 565 students registered to acquire education. The post-apartheid government managed to successfully transform the South African communities by increasing the number of schools in low SES communities and making education easily accessible to many. Furthermore, enrolment at higher learning institutions have also increased steadily over the past 21 years in South Africa across population groups (Department of Basic Education, 2018). According to McKeever (2017) these numbers are much higher than those found in any other country on the African continent. However, De Clercq (2020), among others, has demonstrated that despite these large changes in the South African education system, there is still a large gap in the equality of education.

Furthermore, higher educational institutions and students seeking higher education in LMIC’s confront a number of challenges. These include growth in the number of students’ and insufficient investment in the education sector. The latter has resulted in an increase in the

growth of abilities among pupils, necessitating remedial classes, which have proven difficult to implement effectively in LMIC‘s (Suresh & Kumaravelu, 2017). Furthermore, Mataka et al. (2020) emphasises that the language used by institutions in LMIC countries when teaching is a challenge. In a country like South Africa, where 11 official languages are spoken, using English which is a second language for many pupils, can be problematic because the content is difficult to comprehend, which arguably further extends education inequalities.

2.3 Self-perception

According to Bem (1972), many studies in psychology are driven by one of two objectives: first, to comprehend the mental processes involved in how people perceive the social environment, and second, to investigate how the social world shapes self-processes. People form a perception of themselves through the process of how they view the environment and how the social world defines them. Kawamoto et al. (2015) further explains that the social sciences is interested in the interplay between intrapersonal and interpersonal processes, and they agree that neither can be comprehended apart.

As explained by Mohebi & Bailey (2020), individuals learn about themselves through their attitude, emotions, and other internal states. This self-perception hypothesis was developed in response to a requirement to solve a question around ‘philosophy of the mind’ (Ryle, 2009). The self-perception theory proposes a partial identity between self and interpersonal perception: to the extent that internal cues are weak, ambiguous, or interpretable, the individual functions in the same way as an outside observer, who must rely on the same external cues to infer the individuals’ innate state (Bem, 1972).

Self-perception theories by Brummelman & Thomaes (2017) further show that self-perception is initiated when an individual starts having little comprehension of their surroundings. The views, feelings, and attitudes that a person has about himself or herself are sometimes referred to as self-concept. Self-perception therefore is an overarching concept that includes this image we have of ourselves and our characteristics, as well as the judgments we make about them. Bosacki (2014) further explains that our self-concept, or the image we have in our heads of who we are, and our self-esteem (i.e. how we rate and evaluate those attributes) are two key perceptual processes. The terms self-concept and self-image are frequently used interchangeably to describe

one's overall self-perception in the literature according to Wehrle & Fasbender (2019). However, for the purpose of this study self-perception will be operationally defined as an overarching concept to avoid conceptual confusion.

Therefore, according to the self-perception hypothesis, people judge their own activities in the same way they perceive other people's actions, and everyone's actions are determined by their own free will (Mohebi & Bailey, 2020). Students', as the theory argues, are not immune to environmental influences. In a study conducted by Mohebi & Bailey (2020) it was demonstrated that when students' become aware of how their peers view them - their self-perception - affective reactions, motivation, and behaviour can alter. Furthermore, Ugur (2015) further explains that self-perception and related motivational aspects are also intrinsically shaped by others and therefore the social context.

From the developmental psychology literature, the development of the self-concept starts at birth and continuous through to adulthood (Brummelman & Thomaes, 2017). According to Mascall, (2000) babies between the ages of 0 and 2 years require a caring and constant relationship in order to establish a positive sense of self, and in order to do so, a relationship must be built in which the parent or caregiver learns the baby and the baby learns the parent or caregiver. Mascall further explains that although forming one's self-concept is a lifelong process, how children feel about themselves in the early years (positive or negative) can set a pattern for the rest of their lives. Finally, between the ages of 5 and 6, children transition to "big school," with some entering with enthusiasm and others with apprehension. "Big school" comes with new challenges for the children and those challenges help in developing a strong and positive sense of self (Mascall, 2000).

Furthermore, Anderson (2017) demonstrates how self-perception in children can influence how they handle a new situation, whether it is at school, at home, or on a family outing in public. A study conducted by Anderson (2017) with 50 participants between the ages of 7-16 years, showed that those who scored higher in negative affectivity (emotion) scored lower on the domain global self-worth, using the Susan Harter Self-Perception Profiles (SPP) as their measure focusing on the subscales of behavioural conduct which begins at the age of 8 and global self-worth, they showed that negative affectivity predicts future adolescent behaviour. In other words,

these findings imply that negative affect (emotional) temperament has a strong association with adolescents' own sense of self in terms of how they see their behaviour.

Furthermore, individuals' academic performance and choices are determined not just by how important the activity is to them, but also by their expectations for success (Wigfield & Eccles, 2000). According to Wigfield & Eccles, a students self-perception of his or her abilities and how they assess their competence in a particular topic within a subject has a direct effect on their mark anticipation and as a result, their anticipation influences their performance. Taken together, although the concepts related to self-perception have been well-studied using quantitative methods and have found a range of behavioural outcomes related to educational attainment, few studies have drawn on qualitative approaches to explore the underlying reasons behind these associations, especially in LMIC contexts.

2.4 Resilience, growth mindset and grit

Self-perception however does not develop in isolation and is often linked with related self-processes, specifically, resilience, growth mindset and what has been termed "grit" in the more recent literature. To start Mampane & Bouwer (2011) define resilience as having a disposition to identify and utilise personal capabilities, competencies (strength) and assists in a specific context when faced with perceived adverse situations. This relationship between the individual and adverse environmental or external can therefore result in behaviour that produces long-term positive effects, such as continual learning (growing and renewing) and managing the circumstance with flexibility. In the 1960s, psychologists used the term resilience to characterize those who successfully adapt to adversity (Luthar et al., 2000; Masten, A., 2012). Wills & Hofmeyr (2019) explains that this word was then employed in educational research to refer to students' who obtain good academic achievements despite facing significant academic risk in later years.

Kong and colleagues (2020) explain that poverty is well recognized as one of the most common determinants of early adversity in children. Students' from low-income families, for example, are thought to be at a higher risk of failing to succeed academically (Wills & Hofmeyr, 2019). However, some students' from low-income families are able to consistently maintain good academic performance. It is well documented that despite difficulties, a considerable proportion

of students' from underprivileged backgrounds are able to overcome the odds and succeed (Masten, 2014). Therefore, despite the evidence that there is a strong relationship between educational performance and low SES, recent studies have revealed that students' from low-income families can attain remarkable academic results (Agasisti & Longobardi, 2017), however the underlying reasons behind this are not well documented or understood. Wills & Hofmeyr (2019) argue that resilience may moderate the effect of adversity, including low SES and academic achievement. Relatedly, a series of studies from the educational psychology literature have shown that socio-emotional skills – including self-efficacy and self-confidence - are one of the strongest predictors of academic resilience (Gizir & Aydin, 2009). For example, a positive attitude towards school (Das, 2019) and having high educational aspirations, have been strongly associated with academic resilience (Cappella & Weinstein, 2001; Cappella & Weinstein, 2001; Gizir & Aydin, 2009).

In a study by Das-Brailsford (2005), 16 students in their first-year of study at higher learning institutions who were from a lower SES background in South Africa were studied using anthropological methods of data collection that included ethnographic interviews, case studies and observations to explore factors that contribute to resilience. In their findings, students' from disadvantaged SES backgrounds who were resilient were shown to be high achievers and goal-oriented, showed initiative, were motivated, and felt a sense of agency over their own lives. Participants' own individual traits, the assistance of families and role models, and finally, supportive schools and communities were recognised as having helped participants' achieve academic accomplishment (Das, 2019).

Secondly, growth mindset – understood as the belief that intelligence is not fixed and can be developed – has equal relevance to the wider theoretical concept of self-perception (Claro et al., 2016). Claro et al. further explain that recent research has consistently shown growth mindset as a powerful predictor of academic success, and it has a favourable association with a large spectrum of SES groups. Results suggest that students' who report a growth mindset (i.e. believe their intelligence is changeable and not fixed) who come from low SES background may be safeguarded against potential adverse effects because they have a different perspective of their situation. Recent studies have shown that they are protected against the negative impacts of poverty on academic performance for example (Wills & Hofmeyr, 2019). Blackwell et al. (2007)

state that compared to fixed mindset students', students' with a growth mindset, regard difficult assignments as a method to improve their abilities. Furthermore, according to Romero et al. (2014), students' with a growth mindset seek out demanding learning experiences that allow them to do so. As a result, children with a growth mindset do better in school than students' with a fixed mindset especially when faced with challenges, irrespective of SES backgrounds (Blackwell et al., 2007). Therefore, growth mindset may play an essential role in academic achievement.

Lastly, a fairly recent concept – grit – understood as a passion and perseverance for long-term goals - can be incorporated into this wider notion of self-perception (Eskreis-Winkler et al., 2014). Hochanadel & Finamore (2015) continue to explain that a growth mindset in learning is based on this concept of grit. Similar to resilience, students' who endure in the face of hardship and challenges appear to have what has been termed as 'grit' in more contemporary literature (Hochanadel & Finamore, 2015).

Taken together, evidence suggests that a students SES background has the ability to predetermine their academic success, however psychological factors such as resilience, growth-mindset and grit may act as buffers or protective factors that counteract this relationship (Das, 2019; Duckworth et al., 2007; Eskreis-Winkler et al., 2014; Mampane & Bouwer, 2011; Masten, 2012). Consequently, insight into the students' self-perception – as an overarching concept - during their high school years can help unpack the underlying processed and experiences involved and offer a distinctive approach to understand the influence of self-perception in educational attainment.

2.5 Theoretical Framework: Ecological systems theory

Founded by Urie Bronfenbrenner, ecological systems theory integrates how various types of environmental systems influence human development (Peppler, 2017). Ecological systems theory, according to Rus et al. (2020), is concerned with the quality and context of an individual's existence as seen through developmental phases that take place within the context of complex interrelated systems. Therefore, within this framework, an individual's environment and ecological realities have an impact on their development and behaviour.

Peppler (2017) further state that micro, meso, exo, and macrosystems are the four environmental systems that make up ecological systems theory. Microsystems are the basic system of the ecological model, consisting of a series of intricate connections between a developing individual and her immediate surroundings or setting (Rus et al., 2020). Rus et al., (2020) continues to explain that exosystems refer to the broader community in which the child lives, while Mesosystems refer to how people in different systems around the child interact and are connected to one another. Finally, macrosystems considers what is going on at a larger social level and how it affects the child's other systems.

Furthermore, this study will explore how self-perception influences academic attainment in the context of low SES conditions, using a qualitative research methodology and guided by a phenomenological approach. Researchers draw on qualitative methods to explore and comprehend people's realities as they are told. According to Lincoln & Guba (2000), qualitative research takes an interpretive and naturalistic approach, which means qualitative researchers investigate phenomena in their natural environments, aiming to make sense of or interpret phenomena in terms of the meanings individuals assign to them. Taken together, this study aimed to gain a deeper understanding of the role of self-perception in high achieving students from low SES backgrounds by using a phenomenological and ecological systems theoretical framework, qualitative research methods.

Chapter 3: Methodology

Research methodology is a collective term for the structure process of conducting research. Among other things research methodology seeks to inform: why a research study has been undertaken, how the research problem has been defined, what data have been collected and what particular method has been adopted and why a particular technique of analysing data has been used (Tobin & Begley, 2004). In Chapter 3, the research methodology is discussed. In this section, fundamentally, the research question of the study, the participants' of the study, the instruments and the procedure of the study are discussed, followed by the study design, sampling, procedure, analysis method, trustworthiness and ethical considerations of the study.

3.1 Research question and study design

The main research question that guided this study was:

> What are the lived experiences of self-perception in high achieving students coming from a low socioeconomic background in the low-to-middle-income context of South Africa?

As a result, this study was a qualitative exploratory study. Semi-structured qualitative interviews were implemented and this study was guided by a phenomenological approach to explore the lived experience of high achieving students coming from a low SES background as related to self-perception. The semi-structured questionnaire consisted of both retrospective questions (targeting high school experiences) and questions on their current university experience (details in sections below). For the purpose of this study, self-perception was considered as an overarching concept to include: academic self-perception (Shen & Pedulla, 2000), self-concept (Brummelman & Thomaes, 2017), resilience (Luthar et al., 2000; Mampane & Bouwer, 2011; Wills & Hofmeyr, 2019), growth mindset (Duckworth et al., 2007), fear of failure (Martin & Marsh, 2003) and sense of belonging (O'Brien & Bowles, 2013). In this study, low SES background was defined using the criteria for the National Student Financial Aid Scheme (NSFAS) which includes students who have a combined household income of less than R350 000.

This study falls part of another larger study (as explained in previous Chapters) that is investigating self-perception and academic achievement using data from the 2018 Programme

for International Student Assessment (PISA) survey. As described in Chapter 2, the five self-perceptions variables used for this study were drawn from data available in the PISA dataset. This study falls part of the qualitative component of the larger international study, which aims to enrich the survey-based results available in the PISA dataset by looking at the lived-experiences of students' self-perceptions as related to academic achievement in high-school and university.

3.2 Participants and sampling technique

The sample is the group of individuals who participate in the research. The convenience sampling technique was utilised for this study, which included the individuals who were more accessible to the researcher. For this study, the researcher utilised first-year students' that are enrolled at university.

This study aimed to recruit between 12-20 first-year university students' who are between 18-20 years, coming from a low SES background. A sample size of approximately 12 is seen as enough to achieve data saturation in qualitative research (Braun & Clarke, 2006), therefore a sample size of between 12-20 participants was considered as adequate. Specifically, a population of first-year university students' were used – in an age group close to graduation from high school – as to identify the target sample most suited to participate in retrospective questions based on high school experience. Inclusion criteria included: (1) registered first-year university students; (2) being between the ages of 18-20 years; (3) applied for or received NSFAS support; and (4) able to conduct the interviews in English.

Firstly, convenience sampling was used by requesting permission from University Registrar at the University of the Witwatersrand (Wits) to send an invitation to participate in qualitative interviews to first-year students' across faculties who are receiving NSFAS support (see appendix F for draft of the permission letter) and who meet the inclusion criteria. Permission via email was received by Wits Registrar to send invitation to the select sample and the email invitation was sent to 8873 students' at Wits University. Furthermore, snowball sampling was used to include a larger pool of participants that included other first-year students from other South African Universities who met the inclusion criteria.

3.3 Instruments

Demographic questionnaire

A demographic questionnaire (see Appendix A) was administered to participants to acquire information regarding: age, gender, cultural background, population group, home language, high school, parents education, current university enrolment and SES status. The demographic data was used for descriptive purposes, however, some data was used in gaining more detailed understanding of the students' interviews.

Semi-structured, retrospective qualitative interviews

A semi-structured interview was used consisting primarily of open-ended retrospective questions their regarding high-school education, as well as open-ended questions related to the present ie, their current university experience (see Appendix B). The interview questions used were adapted from survey questions related to self-perception pulled from the PISA database (OECD, 2019; also see http://www.oecd.org/pisa/data/2018database/CY7, 2018 for survey questions) relating to five identified aspects of self-perception, namely: academic self-perception, self-efficacy, growth mindset, fear of failure and sense of belonging, as described in Chapter 2.

3.4 Procedure

After the email request from the University Registrar were sent requesting students' to take part in this study, students' who volunteered and agreed to participate were emailed a Participant Information Sheet informing the participants' about the research study (see Appendix D). After the participants' had thoroughly read the consent form and signed it, a semi-structured interview was organised at a suitable time and date. The interview was conducted in English by the researcher. Informed written consent was first obtained (see Appendix C). Questions in the demographic questionnaire were asked first to the participants, followed by the semi-structured interview. Interviewees were given the option of in-person or virtual interviews, however all participants requested interviews to be conducted online. Therefore, the interviews were conducted using an online platform, specifically Zoom, at a suitable time that was convenient for the participants.

The interviews lasted for approximately one hour. Two pilot interviews were conducted to assess the duration of the interview and test the questions thoroughly. Lastly, the verbal cues of the interviews were audio recorded using a digital device and later transcribed.

3.5 Data analysis

The data analysis process consisted of three steps. Firstly, the audio recordings were transcribed manually. Secondly, the transcriptions of the interviews were analysed utilising thematic analysis using principles outlined by Braun & Clarke (2006), which are divided into six phases. First, the researcher read the participants transcribed interviews several times until the researcher was familiar with them. Following that, the researcher re-read the data gathered again, identified and highlighted meaningful phases, statements or words that seemed to be important. Thereafter, the researcher took each significant statement and gave it a code. The researcher then organised different statements into clusters of themes. After this phase, similar themes or meanings that were identified by the researcher were grouped together. In the final phase, the researcher found the links between the themes described and then summarised them. Regularities and sets of similar ideas were grouped into themes and compared. The full interviews were therefore analysed independently by the researcher to derive the underlying themes related to different aspects of self-perception retrospectively and at present.

Therefore, using the above-described thematic analysis process, two steps of data analysis were conducted to align with the study aim: (1) a general thematic analysis was conducted on the full interviews; and (2) an additional thematic analysis was conducted on each of the five self-perception variables to identify specific themes related to each self-perception variable as per the interview schedule (see Appendix B). Retrospective questions and questions related to their current university experience were used in both steps of the analysis process. These findings were used to explore reasons behind the patterns that have been found in past research. Consequently, the data obtained provided an in-depth understanding of self-perception and lived experience of high achiever students who come from a low SES background.

3.6 Trustworthiness

This study ensured its trustworthiness by using the criteria introduced by Lincoln and Guba (2000) to parallel the conventional quantitative assessment criteria which are credibility, transferability, dependability and confirmability. Credibility was ensured by adopting the correct method of research and triangulation and the study accurately assessed and documented the interviews of the participants. To ensure dependability, the process with which the researcher implemented was clearly detailed, the sampling technique, data collection and research design

was documented. Additionally, the researcher kept a reflexive journal to keep a record of one's feelings about the interviews and reflections. Confirmability is concerned with establishing that the researchers' interpretation and findings are clearly derived from the data (Tobin & Begley, 2004). Through the use of thematic analysis, this study ensured that the findings are a representation of the participants and not those of the researcher.

3.7 Ethical considerations

Ethics are conduct standards that enable researchers to differentiate between what is right or wrong and permissible conduct (David & Resnik, 2008). Therefore, ethical principle and standards were sustained throughout the research study. Ethical clearance for this project was requested and approved by the Human Research Ethics Committee of the University of the Witwatersrand (see Appendix E and G; ethics number MASPR/22/11). The researcher has also undergone ethics training in February 2022 during the postgraduate Master's training program held at the Department of Psychology at Wits (please see appendix F). The following ethical considerations were examined in the study:

Informed consent

Informed consent is the basis for a research project (Denzin & Lincoln, 2002). Informed written consent from participants' was obtained (see Appendix C and D for participant information sheet and consent form) and dealt with, with most extreme care and consideration for each participant. Participants' were informed about what will be asked of them, how the data will be used, and the potential risks or harms (Koonin, 2014). Participants' were informed that they could withdraw at any given moment.

Confidentiality

Participants' confidentiality takes place when the researcher is aware of the participants' identity but the data has been de-identified and the identity is kept private (Fleming, 2018). In this study, confidentiality was sustained by keeping any identifying information anonymous when reporting and publicising. Participants were made aware about how their identities and personal information will be kept safe. Demographic and interview information was stored in password protected documents and files and only shared with the project's supervisors and research collaborations in an anonymised form.

3.8 Reflexivity

I was first drawn to this research question because I am a 26 year old Masters student who was born and raised in Soshanguve (a township located in Pretoria) in Gauteng, South Africa. I was raised in a household of five (both parents and 2 siblings), but my father was the only bread-winner and that resulted in both my siblings and I having to attend public schools from Grade 1-12. Attending public schools and living in a township exposed me the unpleasant side of life – dropping out of school being one of them. I have witnessed many young people drop-out of school during their high school years. I have also witnessed some young people persevere and making it out of the township.

From my personal experience, sometimes being exposed to the township life and its' lifestyle makes it difficult for the younger generation to see beyond their environment, they literally have to be resilient and make themselves believe that there is more that life has to offer and that belief, influences their determination at school so that they might be afforded the opportunity to enroll at higher learning institutions.

This research aims to explore how self-perception influences academic achievement of students from lower socioeconomic backgrounds, which I have lived and experienced and because of that I might relate to some of the participants and it might impact decisions I make in my research. A reflexive journal was also kept during the research process that helped me to actively reflect on myself after every interview.

Chapter 4: Findings

This chapter presents the demographic characteristics of the participants, the general thematic results and the thematic analysis as related to each of the five self-perception constructs.

4.1 Participant demographic

For this study, 12 participants' were recruited and interviewed using semi-structured retrospective interviews digitally conducted using an online platform – Zoom (see Chapter 3 for details on procedure). The participants' consisted of first-year university students' who are funded or eligible to apply for NSFAS, as per the studies inclusion criteria. As described in Table 1, participants' identified as three different 'race' groups as specified in the demographic questionnaire, specifically, 10 Black students', 1 White student and 1 Asian student. The participants' age ranged from 18-20 which was one of the requirements to be eligible to participate in the study. Of the 12 participants' nine identified as females and four as male. The students' were from different faculties which included Humanities (n = 9), Engineering (n = 1) and Commerce, Law and Management (n = 2). Within these three Faculties the participants' were enrolled in different courses, specifically: BA General, Bachelor of Arts, BA Law, Social Work, Speech Language Pathology and Audiology from the Faculty of Humanities; Mechatronic Engineering from the Faculty of Engineering ; and Legum Baccalaureus from the Faculty of Commerce, Law and Management. The participants' were registered at two different universities, specifically, the University of the Witwatersrand (n= 11) and University of Cape Town (n=1).

Table 1: Participant Demographics

Pseudonyms	Age	Sex	Faculty	Degree registered in
Jessica	19	Female	Humanities	BA Law
Natalie	18	Female	Humanities	Bachelor of Arts
Zinhle	18	Female	Humanities	BA General
Mulalo	18	Male	Engineering	Mechatronic Engineering
Bontle	19	Female	Humanities	Bachelor of Arts
Mbali	19	Female	Humanities	BA General
Koketso	19	Male	Humanities	Bachelor of Arts
Katie	18	Female	CLM	LLB
Tsholo	19	Female	Humanities	Social Work
Warona	19	Male	Humanities	Audiology
Botlhale	18	Female	CLM	LLB
Lesego	20	Female	Humanities	Speech Language Pathology

4.2 General themes identified

After implementing the reflective thematic method of qualitative analysis described in Chapter 2 (Braun & Clarke, 2006), two primary themes were identified as shown in Table 2. Specifically,

the overarching themes identified were: (1) validation; and (2) socialisation. Each theme and sub-theme is reported below using direct quotations from participants' interviews that best demonstrated their lived-experiences on how they perceived themselves in relation to their academic attainment retrospectively at high-school and at present at university.

Table 2: Summary of general themes and sub-themes

Themes	**Sub-themes**
Validation	● External validation ● Internal validation
Socialisation	● Introversion ● Extroversion

4.2.1 Validation

This theme focuses on how the participants' communicated their opinions and feelings on the contribution that the validation they received affected their self-perception in reflecting on both their retrospective experiences of high-school and their current experience academically in first-year University. Across the participants', a primary theme of validation, which consisted of positive affirmations on the self and capacities were found. However, this is distributed according to external and internal validation.

External validation

This sub-theme refers to support or positive feedback the participants' received from their family and friends. Some of the participants explained that they did not really believe in themselves in high school. They continued to express that they could not have been able to finish high school if it was not for the external validation that they received, showing how external validation influenced their internal feeling and self-efficacy.

Tsholo: *"There are times when I didn't believe in myself but my friends help me believe…*

cause by myself I would have never gotten out of high school cause I didn't have that much faith. […]"

Participants' also described that it was the external validation, from friends, family and sometimes teachers that kept them going and that helped them stay focused. Again, showing how this external validation from family and friends primarily helped influenced their self-perception.

Lesego: *"[…] the only belief that I would say got me through hard times, you know, the belief from home? They are like "I believe in you, you got this" what not but individually I really do not think I had any […]"*

Tsholo: *"[…] but with the help of my friends, they helped me believe and you know, they helped me stay in focus, like have the momentum and the energy to like keep on pushing even if like I didn't want to like push forward, they helped me to keep on pushing so that I believe I can."*

Additionally, another participant explained how external affirmations from her mother would sometimes be accompanied by physical exercises that would help with feeling motivated.

Katie: *"[…] but I again if I needed that motivation uhm.. my mom was there to encourage me or yah, we just sit down and breathe – meditate a bit and tell myself everything will be okay."*

Similarly, another participant described that seeing other people from a similar background succeed validated her dreams and gave her that internal drive:

Natalie: *"[…] I am not the only one who comes from a poor background, there are people who also coming from a poor background who have made it in life so seeing other people coming from poor backgrounds, achieving those things so yah they give me a sense of belief ukuthi [that] if they were able to do it then why can't I? So yah, I used to believe gore (that) if someone was able to do it then I can also do it."*

In comparison to other participants', Mbali explained that other external factors, rather than validation, such as setting a good example for those younger than her and the fear of being a disappoint, is what kept her motivated to be a higher achiever.

Mbali: *"My self-belief was grounded in the fact that a lot of people believe in me like I had a close relationships with a lot my teachers and they believed in me a lot like a lot a lot and I also have nieces and nephews who look up to me, so I thought I should be a good example and I should not disappoint people who believe that I can. No, no really. It wasn't like toxic pressure*

as in you had to this as in you have no other way, yes I had to do it there was no other way but I didn't think of it like that, I thought it as they are my supporters, they are my cheerleaders."

Mbali: *"[…] but academically wise, I am the closest, I am at the tip of the tongue when they think of comparing me. If my little sister does bad, my mom will be very quick to say "you won't do as good as your sister or you won't do as good as your brother."*

Internal validation

This sub-theme refers to gaining a sense of self-worth based on internal factors that influenced academic achievement retrospectively in high-school and at present. One female participant explained that her level of confidence played a significant role in her perception of self:

Botlhale: *"Confidence! I wouldn't be that much hyper as everyday but I believed in myself so much that the way I walk, the way I talk, yah that's me so I had confidence in myself that I can do this… okay fine, I am capable, I have this thing that "I can and I will" so once I say that I can and I will, I will do just whatever."*

Furthermore, two participants' expressed that they were self-motivated and this was a result of seeing themselves enrolled at a higher learning institution. They further explained that having this vision for the future helped them to keep focus and be self-motivated.

Jessica: *"[…] it was more of me pushing to like reach the end, it wasn't a thing of me telling myself that you got this, it was a thing of you are almost done, just finish."*

Bontle: *"I think my motivation to not repeat high school or not to rewrite, just to get into university of my choice I think yah, I think the motivation got me where I wanted to be."*

Moreover, two participants spoke on the importance of internal validation. The first participant explained that although they acknowledge the role that external validation plays, for them it was not enough to keep them going and for their positive self-perception. For them, self-motivation was imperative. Furthermore, the second participant similarly explained that they constantly reminded themselves that they are the best.

Zinhle: *"[…] it pushed me cause if I knew I was… cause if I told myself I can do it, I think that was the best motivation for myself cause someone else telling you you can do something is not the same as you telling yourself."*

Koketso: *"Okay maybe because I always told myself that I am the best. I always like motivated myself whenever I was going through hard times. I think that is the thing that helped me get through hard times yah in high school."*

On the other hand, one male participant explained that his internal validation was increased by making necessary preparations especially for upcoming examinations at university. The participant's level of preparedness increased their self-belief, which resulted in him feeling motivated.

Mulalo: *"Yah.. in high school like I used to believe in myself cause, especially, okay let's say uhm.. the hard times that I faced in high school was when we were writing the tests cause when we were writing tests I used to be not that prepared enough so yah, struggling through the test but then I knew come exams because I used to prefer the same thing when the deadline is near but when the exam comes I used to make sure that I finish everything, I know everything – whatever that is challenging me I make sure that I go through it all over again until I understand, so I knew that in exams I do better than what I did in the test."*

Interestingly, validation was a primary theme across the participants', however, it was distributed according to both external and internal validation. There seems to be a balanced need for both internal and external validation for the both male and female students'. In the retrospective accounts, looking at both the female and male responses, balanced sentiments about validation were expressed and it seems like constant affirmations from other people and the self were significant in the success of the students.

4.2.2 Socialisation

Socialisation was another general theme identified across the interviews. Participants' placed a lot of importance to relationships among their peers during retrospective questions relating to high-school and to their current university experience. The majority of the participants' described the difficulties they faced in interactions with peers and how this influenced their

internal beliefs. There was also a common narrative of the relationship between these peer interactions and with being self-critical. Although, socialisation was a common theme, experiences were however distributed according to more characteristics related to introversion and extroversion.

Introversion

One participant explained that their mental health struggles made it difficult for them to relate to their peers. As a result, this influenced how unsure they were about making friendships and being perceived as likeable. These mental health struggles therefore forced introverted practices. For example, mood fluctuations that forced participants to distance themselves from friends and influenced their self-worth:

Katie: "*[…] it makes it harder because most people don't really want to deal with their friends mental illness and mental illness honestly often makes people act out you know, sometimes they are very sad and distant other times very loud and outgoing."*

Participants' described that this constant reminder that they are not likeable to their classmates and resulted in being self-critical and in-turn effected their academic performance. These introverted feelings and social isolation described by the participants' sometimes resulted in feelings of non-belonging. Interestingly, these feeling of non-belonging sometimes became what sometimes drove them to their success, as described by one participant below:

Mbali: *"I did not care about belonging in high school, I did not. I had a group of friends, I had break with but if they arranged their little thing and did not include me, I really didn't care much. I knew that I am not a social butterfly so when they created plans and did not include me I was like ah! Okay! It's fine! I think it is a social problem because I have a resting b* [inappropriate] face so people automatically think I am not approachable, people already have ideas before they actually meet me and the people that are close to me say that 'you are an awesome person to be with, when I am with you I hardly get bored, we never keep quiet'. So I think that what makes me not care, the people that are close to me know what kind of person I am, those that are far, whatever they say I just brush it off."*

Taken-together, these feelings of social exclusion and non-belonging were influential in acting as an internal driver, with self-perceptions not being dependent on external validation of peer

influence. In comparison however, other participants' explained that feelings of self-doubt and being self-critical were very pervasive in social settings. This in turn sometimes had a negative influence on their self-perception and their abilities.

Lesego: *"Sometimes I do not know what to say in social settings – like situations or sometimes I will over analyse everything to a point where we could be going out, we could be having fun but I am no longer having fun I am over analysing everything I am doing – how I am talking, how I am walking, you understand? And that puts me in an awkward position, it really… it starts feeling a bit off. "*

Tsholo: "*[…] cause I didn't have the strength or the will power to approach anybody and be like 'oh hi, how are you?' And try to know them cause like I am too much in my space and it felt like 'oh what if they do not like me?' so like I questioned every action so yah basically the way I made friends is by them approaching me and trying to know me."*

Extroversion

This sub-theme refers to how the participants' outgoing characteristics influenced their self-perception. Specifically, this theme illustrates how participants' positive self-perception created a level of self-esteem within them that attracts their peers to their space. As explained by the two male participants' below:

Mulalo: *"I feel like everybody liked me because like I was that one guy who was very funny you know, I was person who – you see those uhm.. who sits at the backseat and makes jokes about everything? Yah I was once that guy […]"*

Warona: *"[…] But most of the people used to like me in high school because even if approached someone 'hey, how are you?' they would just say 'I would never thought you would talk to me, I have always wanted to have the opportunity or anything' yabona? So we were known with my friend […]"*

Additionally, one participant explained that because of her social skills she was known to some of her classmates or peers as a person that can be depended upon with anything that was in related to their schoolwork.

Natalie: *"Yoh! Yoh! Like I said students used to like me because yah – they would like me because of how selfless I am, I would be like.. I'm that type of person they would rely on, if they want something they knew ukuthi [that] there's me, I was always available to like give a helping hand. So yah, that's what made them like me. Mostly my classmates but also people outside the class, yah they were not a lot but then they were there."*

Although some participants' extroversion came naturally to them, one participant expressed that they had to put in some work to get over their difficulty in interacting with other people.

Zinhle: *"It was very challenging at first but after that everything went smooth, cause I am a bit shy at the beginning and I am very reserved. Uhm.. I stepped out of my shell and started greeting people in the morning and answering more in class."*

The responses suggest that the participants' ability to socialisation had an impact their academic participation and self-perception. The more extroverted students' display positive self-perception and do not hesitate to assist other students with their schoolwork, whereas the introverted students appear to depict indications of having negative self-perception and withdraw themselves from participation.

4.3 Identified themes specific to self-perception constructs

In comparison to the overarching thematic analysis of the overall interviews, additional themes were identified for each of the five self-perception variables, as summarised in Table 3. These themes were identified and described for the retrospective experiences at high-school and their current experiences at university separately below. Retrospective questions were only asked for the self-perception variables, fear of failure and sense of belonging, and are therefore only reported below.

Table 3. Themes identified specific to self-perception construct

Self-perception construct	**Identified themes**	
	Retrospective	*Current*
Academic self-perception	● Individual drive ● Self-doubt	● Self-doubt ● Adjustment ● Confidence in their ability
Self-efficacy	● Opening-up ● Work-ethic	● Avoidance ● Sense of pride
Growth mindset	● External environment ● Intelligence is innate	● External environment ● Willingness to learn
Fear of failure	● Assigning blame ● Accountability	
Sense of belonging at school	● Familiarity ● Lack of belonging	

4.3.1 Academic self-perception

Retrospective

Individual drive

In looking back at their academic life and achievement in high school, participants' attributed their accomplishments to hard work and dedication. One participant mentioned that they did not want to find themselves in a position where they do not get accepted into a university of their choice:

Mbali: *"Oh they were good, they were great. Like especially last year [in high school], I studied night and day I only slept like 2 hours. I would come back from school at 16:00, sleep from 16:00 and then from 18:00 until 2am I would be studying."[…] And the high school, it's just been established it's younger than 10 years or round about 10 years so I didn't really think highly of it and didn't really think if I was enrolled there I would be able to go to such universities – I wouldn't be able to be accepted in UCT or Wits or the university I'd like."*

Another participant explained how the situation at home influenced their internal motivation.

Lesego: *"From the get go you know to be honest with you from the get go, cause like I said my mom lost her job in grade 7 and that's when reality hit you know cause I mean it was late grade 7 towards the start of high school basically and that's when reality hit for me and that's when I was like 'I actually have to work' you know because.. like that's when I realised that I do not have a backup plan like I can't fumble my academics so since I learnt that from a very young age from the get go, I've always been like working to make sure that if like an opportunity knocks, like an opportunity that is academic related I have the marks, I have the credentials you know to back me up for that opportunity because I genuinely do not have a backup plan so I learnt that from a young age that I have to take my academics very very seriously and that is why (laughs) I've actually been you know working and pushing to make sure that I get good marks no matter what."*

Self-doubt

Nevertheless, another explained that they depended on a lot of external help to influence the internal motivation they needed to achieve academically at high school. Self-doubt was a common theme that resonated among most of the participants.

Tsholo: *"In terms of high school I'm not gonna lie, it was a challenge, like it was a challenge. So in terms of like focusing cause not everything was easy and the pandemic made it even harder to try to like focus in terms of academic wise but I got help from most of my teachers, extra classes you know during break time I would spend it with a teacher – a particular teacher for a particular lesson and a particular topic that I didn't understand, yes so that I can pass and like maintain, as I said I'm an average student so yah I tried my best."*

Moreover, many of the participants' explained how individual drive forced them to take different initiatives to improve their marks beyond the support given to them at school.

Bontle: *"Yah but I also started watching YouTube cause my teacher wasn't really a teacher so I went out to YouTube and found a person that explained the work better and then… basically I understood cause before I didn't understand what I was doing, there I really understood that's why it started to improve."*

Mulalo: *"I feel like high school was very easy because even though uhm.. sometimes I wouldn't understand the teacher I would go through the content myself and understand everything in such a way that I end up understanding uhm.. I end up understanding everything and do well. Uhm.. okay, back in high school I used to like going to the extra classes but then due to the financial burden I couldn't afford one so uhm.. I was forced to just to tell myself I can do this and that is way I had the courage to go through myself even though I did not understand the teaching that the teacher was teaching so I went through the content and I ended up understanding everything in such a way I felt like uhm.. high school was way below me."*

In summary, retrospective accounts of high school experiences showed that academic self-perceptions were influenced by both individual drive and feelings of self-doubt.

Current

Self-doubt

This sub-theme explores the participants' attitudes towards their academic performance in university. Several participants' expressed that they felt as though their academic performance has significantly declined compared to their high school performances. Feelings of self-doubt

were again expressed among many of the participants', but these feelings were heightened when asked about their current university academic abilities referring to themselves and their performance as "average".

Jessica: *"I think I am a very average student and that is mainly because my brother is like very, he like overshadowed me cause he was the first to go to university, he's also doing Honours like he was the first to go to university in the family so I do not feel like above average because my brother is the one that kind of has all the shine and I think I'm just an average student like I'm not smart but I'm also not smart, does that make sense?"*

Mulalo:*"uhm.. right now uhm.. I feel like one of those students who are lacking because feel like being in varsity you know.. a new environment but I am getting there kancani kancani [slowly but surely]."*

Mbali: *"uhm.. currently? I think I am average, I don't know I shift from average to good cause from high school I was a top student, I was in top 10 so then I can say that my academics capabilities were as high as can be but then now I am here and I think I have it but I don't know uhm.. I am average because I am strong in some places and not in other places so I can't say I am good cause that does not correspond with all my courses."*

Contrary to high school, responses suggest that the participants' belief in their academic self-perception had deteriorated because of the new environment and comparison which led them to have self-doubt.

Adjustment

Additionally, the participants' reflected on their lived experiences of the transition from high school to university. When participants' expressed how they are adjusting to university life it was evident that most of them were confident about how they are adjusting to the new environment whereas very few mentioned that they were having adjustment difficulties. One participant stated for example that they were finding the transition to be going well because of their willingness to ask for help:

Tsholo: *" […]I am passing but I am still struggling with a particular course, so I try my best to get extra help outside – my mentors, my mentors mentors so that is how I perceive my academics like trying to get further help beyond the help that I already have."*

Furthermore, a participant stated that despite the challenges and pressure of wanting to make everyone at home proud, she is adjusting well."

Lesego: *"[…] The pressure that pressure that I put on myself one, the pressure that is at home like even though it's not really direct you know but also knowing ukuthi (that) hey it's actually all on you so I feel like a lot of people would actually crash from that pressure but like I can't afford to crash (laughs) so I would say given all of that actually I really feel like I am holding my own, like I really yoh!"*

However, some participants' were not as confident about their adjustment abilities and this was a result of the difficulties they were experiencing in relation to their coursework. Two participants' considered themselves as people who are good with numbers more than theory. Therefore, struggling to adjust to courses that require more reading and writing.

Botlhale: *"[…] and in high school I did science, I didn't do much of like theory but like I'd work with calculations and all that so I was used to numbers, now I had to switch to reading like I am reading fulltime, I am reading theory fulltime (laughs) and it was not nice, trust me on other days I just felt like 'no, this is not for me. No, I just can't' cause like I was not used to the reading thing and like as time went by I was like 'okay, you saying that like you are used to numbers but then why don't you give yourself a chance to adjust like adapt' so I gave myself that chance to adapt and try to get used to reading but I didn't.. like for my first semester, I didn't do exceptionally well I just.. I just.. I just saved the semester you understand? […]"*

Warona: *"Okay I have been having difficulties with two of my modules as I am not used to having to go through theory part. Back in high school and last year I did course mostly ((inaudible)) practical part, I did quite good in maths so last year I decided to do a course in Bsc Mathematics but then this year I changed it to audiology so most of my modules I have to write amaessays [essays] and use note taking kakhulu [a lot] and I am not used to note taking and reading amanotes [notes] so.. which is why I am having difficulties with 2 of my modules cause I*

am still trying to adjust to this way of doing things and getting familiar with essay writing skills."

When combining self-doubt and adjustment, for some of the students', the move from high school to university tampered with their self-perception. Students' went from describing themselves as high achievers in high school to average students'. The move of having to change from numeric subjects to theory modules results in some of the participants' questioning their abilities in university. Therefore, it appeared as if self-perception changed because of having to move to a new environment and having different dynamics.

Confidence in abilities

This sub-theme examines how first year students' currently perceive their abilities with regards to adjusting and reading. When asked how they would describe their reading abilities, the participants' explained that their confidence in their abilities were considered in relation to how they understand the content and their love for reading. Several participants' emphasised that their love for reading both academic prescribed books and personal material helped. They also stated that their confidence for reading was because of the fact that they started reading from an early age.

Tsholo: *"I think out of 10 I can it is a 7 and a half and days were I feel like my brain isn't like fully functioning, it could be like a 4 – a solid 4, reason being I can read like I am fluent in English thanks to my upbringing […]"*

Zinhle: *"Yoh! I used to love reading, I was able to finish a book in a day and then uhm.. I don't read as much anymore, I actually struggle with that now because the course I'm doing needs a lot of reading so yah."*

Lesego: *"Uhm.. I don't want to brag but I think I think I have phenomenal reading ability (laughs) cause I read quite a bit, as a better of fact there is a book right next to me right now. I read a lot so.. from a very young age I read."*

However, contrary to the participants' that have confidence in their reading abilities, several participants' mentioned that they do not consider reading as enjoyable or find any interest in

reading because of their limited attention span which affects their confidence level in their abilities.

Jessica: *"Reading? Uhm.. I'm not a very good reader cause I have a very small attention span so I don't read like at all unless it's for school"*

Warona: *"Whenever I try to read something, okay I do get an understanding at first but then I do not understand the whole thing so I will say my concentration span at reading things is not well improved yah because angithi [right] like we do get amaextra [extra] readings, for amalecture s[(lectures] and mina [I] cannot go through like the whole passage of like the extra reading cause like I cannot concentrate on mostly amawords [words] so there has to be something like maybe a video that will help me to understand that thing so my reading skills – I wouldn't say they are well developed."*

Tsholo: *" […] but like we just find challenges in terms of reading cause like I also have a short focus span so I can't like read for a very long time, my brain just gets tired and like the rest becomes gibberish."*

Botlhale: *"[…] then I would take a book and try to read and I end up sleeping on the book (laughs) so it really discouraged me like in high school, it really discouraged me to do something that has a lot of reading because I was like what's the point to read if I know that along the way while I am reading I will sleep on the book so I just.. I felt like it was not for me yah.. I was not capable of reading something long when… especially when I am alone."*

4.3.2 Self-efficacy

This construct focused on perceived levels of resilience. Participants' explained how they encountered difficult situations in high school and how they currently handle difficult situations in university.

Retrospective

Opening-up

This sub-theme describes how the participants' dealt with difficult situations previously in high school and the methods they implemented to attempt to better manage the difficult situations. The participants' expressed that they relied on the support structure that they had around them and how they felt about their situations after opening-up to them. Several participants' expressed that talking to their family members and friends for support was significantly helpful.

Tsholo: *"Basically I manage in terms of friendships cause I can say I had a good circle of friends that encouraged me physically, mentally and spiritually wise, so they were my anchor for me to manage through all the difficulty of high school. It was through friends that's how I managed, basically they were my anchor, they would encourage me when I was down or just to like motivate me if not motivate me, they would help me in cases where like I had challenges in terms of maybe academics or life in general."*

Botlhale: *" […] until I was fine and talk about it like I really do believe that when I am going through a lot, I don't have to be alone so I feel like I find comfort when I am around people. I would make sure that… okay when I am at school, I make sure I enjoy those like... I had my cousin and one of my friends we were very funny people, we... when I am around them we'd make sure that we laugh. You see here's the thing, see my difficult situation? We would turn it into a joke (laughs) yah. I would take the situation and turn it into a joke so when I think about it I get to laugh, I don't see only like the hurtful part of it but I also like find the humorous part it so I do not feel much pain, you understand? […]"*

Mbali: *"[…] like personally I had a teacher that I would always talk to and she would help me resolve whatever is wrong. She really did intervene a lot in my studies. If she saw a decline in my marks yah I would have to answer what's going on."*

On the other hand, two participants' stated that there are certain situations that require a trained professional and opening-up to a therapist was helpful for them.

Lesego:*"[…] when it has to do with like mental problems it really is just best to go to CCDU honestly (laughs) it's really best to go to CCDU. I had a chat with them uhm.. but I've been using another service, its.. what is this? The helpline? The South African one? SADAG."*

Jessica: *"Social life? (laughs) actually I went through a very difficult time* in *I think it was 2019 uhm.. where I started seeing like a therapist and got put on medication and that type of stuff so it was also a thing of I just had to ask for help."*

On the other hand, when participants' were asked about how they currently deal with the difficulties they encounter academically, several explained that they have come to the realisation that they cannot obtain their qualifications by themselves, they open-up and reach out for help to those that they know can help them.

Mulalo: *"I no longer use the same study style I used to back in high school because like when it came to varsity I tried that but I feel like it was irrelevant to varsity so I had to change my reading skills you know and then now I have to.. remember I told you even though I didn't understand the teacher I used to understand everything? But then now if I do not understand the lecturer there is nothing else that I can do so I make sure I understand the lecturer and I would ask here I do not understand because like uhm.. alone I cannot understand everything, I can understand some but not everything."*

Koketso:*"For example if I am having trouble with my course eish what I would do is.. my older brother is doing Honours in law so he is the person who was helping me with my academics whenever I am experiencing difficulties so if it happens that I am not managing well academically, I will go to him and ask help from him."*

Warona: *"[…] And academically I can't manage all by myself, if there are things I wouldn't understand I would try to ask amaclassmates wami [my classmates] and then they explain wherever they can but then if I see we also failing I will just try using Google and YouTube, that is how I manage to cope with my modules."*

Jessica: *"I think it was the same in high school but it wasn't as much of a prominent issue because there wasn't as much reading in high school compared to in university cause I've noticed I fall behind a lot uhm.. in university because I'm in humanities and it's a lot of reading but in high school there was never that much reading so it wasn't such a big issue but now it is. Uhm.. I normally like ask other people for help or I try to find summaries."*

It is interesting that retrospectively, the students' relied on a community for support when facing difficult situations. Additionally, from the students' accounts it seems like they currently also employ a collectivistic approach in attempt to alleviate the difficulties they encounter. It appears that positive self-perception needed an influence from others and having positive self-perception was and still is beneficial for their success.

Work-ethic

This sub-theme highlights the participants' ability to handle several tasks at once in high school. Participants' expressed that they preferred being under pressure as opposed to doing one thing at a time and this is because they felt like the only time that they were able to get the work done was when they were driven by the inability to avoid doing the work. Within this group, some participants' continued to explain that calmness did not yield productivity.

Natalie: *"I think I used to like that, if I wanna work I like.. if I am determined to work – I do. If I want to work, I do work so like I wouldn't mind multitasking but then if there was just one things to do ahh! I wouldn't have like that energy so having to like do a lot of stuff at the same time would give me energy to like want to accomplish that so it was good for me, it was yah.. it wasn't hard and I used to like it."*

Zinhle: *"YOH!! Uhm.. I do not know because my time management was off to be honest, but I am a person who knows how to okay not know how to but I work under pressure, I leave things to.. even now I leave things to last minute because the pressure like gets it done. I get things done under pressure."*

Mulalo: *"In high school I used to manage but then I was once that guy who preferred to do things uhm.. when the deadline of these things was near so that would force me to do many things uhm.. at the same time and I used to manage cause like if I've got a lot on my plate that will make me to think about how I've got to manage the things so how I've got to manage to finish the whole tasks yah so.. yah I used to manage.. I used to manage to do many things at one time."*

Koketso: *"The thing about myself is that I believe that I can perform very well when I am under pressure, when I'm pressurized that is when I can do things well so multitasking – I can say that it is my thing cause when I am under pressure that is when I can do like things very well cause I get pressure do things, cause when I am at my comfort zone I do not really do anything I just relax so yah I think I did very well when it came to multitasking."*

Working under-pressure appeared to play a role in some of the students' success and being high achievers. Coming from a low SES background and having experience being resilient through difficult conditions may have helped them overcome the pressure. However, several participants' stated that their work-ethic was better when they planned and organised their work, by doing this, the participants' expressed that it helped them perfect and gain something from doing one task at a time.

Katie: *"I would say I did pretty well as well because for me like personally I am the type who likes to write everything down, everything that I need written down so usually I would start on many different tasks at once and try and get them done throughout the week or tackle different things, maybe if it was school related and personal, I think I had a good balance with that."*

Botlhale: *"[…] I would do one thing at a time, I couldn't do like this, this, this.. that, that, that at the same time I couldn't, because if I do this, I do this, I do this, I do this, I know they say it's a good warawara (whatever) skill to have but I feel like if I do this, this, this I lose focus on that, I do not understand that – okay I would be finish on time but then I didn't gain in everything, there is other parts where I lost, where I didn't manage so when I do one thing I know okay I am done with this – I am good, I do this, I am done with this – I am good so that's how I multitask. So I would do everything that is required of me but then at different times, I divide my time accordingly so I can finish everything productively […]"*

Another participant stated that prior to implementing the schedule technique, they struggled to get their work done as the thought of their work that needs to be done put them in a state of panic.

Bontle: *"I think at the end I handled it well but in the beginning there was panicking and what what, cause I don't really use schedules. Like I panic and then I think 'how am I gonna all of this*

done' right? And then yah the schedule is up in my head but at the end I think I handle multitasking well."

Two other participants made a comparison between high school and university's workload in relation to their ability to deal with several tasks simultaneously.

Warona: *"It was much easier, multitasking was like much easier in high school cause you have all the time you need in yourself. Right now, it is not the same cause like you are learning by yourself now so you have to take care of yourself while giving most of your time to your modules.""*

Tsholo: *"I found multitasking in high school easy because everything was just like set out for us, so I could a lot of things like academics in terms of like the different subjects and also sports at the same time, so it was easier then."*

Current

Avoidance

This sub-theme examined how the participants' managed when they encountered difficult situations currently in university. To answer this question, participants' made a distinct difference between how they manage struggles in their private and academic lives. This topic is centered on how the participants' deliberately avoided the difficulty that they encounter. Participants' emphasised that they avoid the difficulties in their lives because they do not want to be affected by their problems.

Mulalo: *"[…] I don't find a solution I just leave it alone and move on with my life you know like that's it. Like.. I feel like yah like people do worry about me not communicating my problems but then like yah there's a part of me that doesn't want to share my problems."*

Botlhale: *"I will start with life in general, I think that I manage because I am ignorant – something can happen now and.. I just love to let things slide so they do not affect me cause I know if I dwell much I know it might cause like much damage than it would if I just let it slide […]"*

Mbali: *" […]like socially if I have a difficult situation, it's either I avoid it in hopes that it will go away – I don't know how but I avoid it hoping that maybe the following day if I had an altercation with a person, maybe the following the day the person would have forgotten about it and we can move on […]"*

Another participant explained that how they use the technique of avoidance is slightly different compared to others. They expressed that avoiding the emotions that are associated with the problem helps them to be in a better place to solve the problem.

Zinhle: *"I'm a person who blocks out emotions like I block it out to try focus on the problem I have at hand in that moment, so I block out my feelings or like.. yah! I block that out and then I focus on the situation that I should and then after that if I have time I go back and reflect and yah"*

Zinhle: *"[…] I don't avoid the situation, to deal with the situation I put my feelings aside, you know emotions may overwhelm you, so I put my emotions aside and deal with the situation."*

However, the participants' stated that whenever they face struggles in their academic life, they actively try to find a solution to the problem.

Mbali: *"Academically in difficult situations I guess I would say I try my best and when my best is not good enough ah no that is when I have a really really mental breakdown cause I know I tried but it seems my trying was not enough but we try again and move forward […]"*

Botlhale: *"[…] And academically uhm.. I cry (laughs) I cry (laughs) uhm.. when I talk about crying it's when I feel like 'you know God this is not it' like I motivate myself that 'okay you are crying Botlhale I can see you but then will you finish crying and get up and fix whatever mess you've put yourself in' like when I am like 3 topic behind or 2 topics behind, I would be like 'okay you are really not fine, I am not okay like how will I cover this?' then I tell myself to 'okay.. don't worry about how you do it but just do it so you can get it done' […]"*

On the other hand, two participants' explained that instead of avoiding the situation at hand, they found other coping mechanisms. For example, a participant mainly gave emphasis to music, expressing that music and YouTube was significant in alleviating their stress levels

Tsholo: *"[…] Music and YouTube (laughs) that's how I manage the difficulties cause it gets stressful and every now and then I have to like distress so I'm always listening to music – calming music. So that I don't have to like overload my brain with work and everything."*

Tsholo: *"technically I am distracting myself with the music (laughs) but I wouldn't necessarily call it a distraction but a way of coping – a coping mechanism."*

Another participant stated that crying was their coping mechanism and was a first step towards confronting and finding a solution to the problem.

Lesego: *" […]to be honest with you I cry hey, I don't know why but I cry and I find that the moment I cry about it uhm.. I actually have more of a clear head and that's when I will be like 'okay look, so this is what you gonna do. You gonna do this, you gonna this, you gonna do this' and then uhm.. I would like to think of myself as a confrontational person like I would actually go to you and be like 'listen uhm.. maybe going through this and you really not helping me, you making it worse by doing this this this, so I'm gonna need you to fall back a little' you know? But most of the time I cry, I talk about it and I am okay after that […]"*

It is interesting that most of the students employ different techniques when they face difficulties in their social and academic life. Literature reports that students with high academic self-perception are able to accept challenges and according to these students' accounts they face academic challenges and try to find ways to overcome it.

Sense of pride

Another point that the participants' talked about frequently was how proud they are of themselves and the things that they managed to accomplish. This sub-theme demonstrates the reason behind the participants' sense of pride. Participants' explained that they were proud of their accomplishments because of the situations they were going through at those particular moments. For example, one participant expressed that the sickness of her grandfather and then later his passing was the exact reason why they are proud of their academic accomplishments:

Zinhle: *"I'm very proud, I'm very proud cause with things I might have been dealing with at that time I was able to achieve a lot for me like yah, like my.. my.. my grandpa passed away just before my maths final exam uhm.. yah he was sick nje throughout the year."*

Additionally, another participant expressed that their focus and refusing to fall into peer pressure when they were in a vulnerable state was one of the reasons they are proud.

Botlhale: *"(deep sigh) I am proud. I really am, how I got to be here today like how I handled myself, how.. yah I really think how I handled situations helped me to be how I am today cause maybe if for my difficult situations, I didn't go to drugs, I didn't like go for boys like when I felt like my life was falling apart I didn't like seek for things which I saw as if I would find pleasure in them but then I really worked on.. on.. on myself like to stand firm […]"*

Furthermore, one participant is very proud of their accomplishment because of their background. The participant expressed that they did not let their background to put them down, they instead remember that an individual's background does not determine their future.

Natalie: *"Yessss!! Yes! Yah like it's a big deal from where I come from there are a lot of people who are not here like I am so for me coming from that background, from that community you know it's a very big deal yah it just shows you that coming from a bad background, a poor background doesn't mean you can't reach higher places, you can if you are willing, if you are determined so I feel very good."*

According to the responses, the participants' prior achievements seems to have worked as a point of reference and a reminder for them, which had a positive impact on their self-perception. Their achievements appear work as a reminder that, having already overcame, they can do it again.

4.3.3 Growth mindset

This construct focuses on the students' opinions and thoughts regarding intelligence being something that an individual can change about themselves.

Retrospective

External environment

Retrospectively, participants' belief about the concept of intelligence being something that can change also included external factors. A participant stated that they believe that their previous

environment was limiting their reasoning capabilities which resulted in a stagnant intelligence level.

Koketso: *"Cause in that time I hadn't like met new people and move out of the environment that I was in so I told myself that I will never change the person that I was, I will stay the same and some habits that I did I never told myself I will let go of those habits you know, so yah, I think that was the reason."*

Another participant stated that looking back, the reassurance from her community about intelligence is what made her to believe that intelligence can change.

Natalie: *"Yes! Yah, there were people who would like.. akere [isn't it that] there are those times you yah you won't perform good or just mess up things so there would be people who would remind me that I am capable, I'm smart so that would just make me believe that okay they are saying I'm smart, I'm capable then yah I can improve my intelligence so yah the people around me would help me like to get that sense of belief like sometimes you just need people to assure us that this is possible."*

Furthermore, two participants' expressed that they did not believe that intelligence can change because of the misconceptions they had at that point in their lives. For example, one participant was convinced that intelligence came with age.

Lesego: *"In high school I really think I was convinced (laughs) that your intelligence increases by age, I really think I was convinced in that because there was always a thing were they will tell you about your IQ and whatnot you know and you are like 'okay but IQ guys?' so I really was convinced and I used to still believe in that myth that you only use 10% of your brain capacity."*

Warona: *"So back in high school I would usually say 'okay fine, I am like this and so there is nothing I can do to change my intellectuals' cause we had this perception that studying hard can make a person go crazy so we used to say there is nothing you can change in your intelligence […]"*

Intelligence is innate

Other participants' mentioned that the reason why they thought intelligence cannot change was because of they thought we were born with it, that some people were meant to be intelligent whilst others were not.

Jessica: *"In high school I didn't think it was something that I could change, I thought it was just we are who we are uhm.. you know the marks you get are kind of always the marks you are going to get because I know sometimes like maths, some people are just not good at maths, I'm one of those people so it was a thing of 'oh well that's kind of just how it is' […]"*

Botlhale: *"No, I think that is impossible because uhm.. yoh! How can I put this? You see how people think? People think differently right? So if I am not gifted in books you cannot like force me – I will try but then it won't make much effect because that's not what I am capable of doing so in high school I really think it was.. it's not, it's not possible to change someone's intelligence because how we think is different"*

Botlhale: *"Yoh (laughs) I think it has to be a gift from God yah, I think like cause I am Christian so I believe that the way is person is its's how God created that person to be so you cannot change how I am by enforcing something that I am not gifted on so I see it as impossible to change ones intelligence because I believe I intelligence comes from God, how I think is how God created me to be."*

On the other hand, a handful of participants' explained that intelligence was something that they had never considered.

Bontle: *"Yah I've never thought.. intelligence? Yah (laughs) I do not think I've ever talked about the word intelligence in high school so yah."*

Katie: *"Mmmh.. to be honest I don't think really paid much attention to the concept of intelligence when I was in high school […]"*

Current

External environment

Several participants' expressed that they felt like the type of environment they found themselves in had a direct influence on ability to change intelligence. For example, two participants' stated that how education is prioritized in a person's immediate environment plays a significant role.

Koketso: *"It depends on like.. a persons' intelligence can change but it depends on the environment they are in, and the people they are surrounded by cause those factors can like play a huge role in like changing a persons' intelligence."*

Koketso: *"Okay, let me make an example about myself, before like I stayed at my hood in Mamelodi like it's a small town, its full of crime – I was surrounded by people who didn't take school and life seriously like the environment that I was in, I would say it was toxic in a kind of but me moving to here and making new friends who like.. They have different mindsets from people that I knew back in the hood, and the environment I am in, I can say it played a role in my intelligence."*

Mbali: *"[…] It also has to do with your family things and all that, if like it's something that is prioritized in your family, if school is not something that is looked down on, if it is seen has something that is necessary and that will help you in anyway as a person that can add to intelligence and also school because yah we have to go to school."*

Katie: *"So I think to me intelligence is uhm.. Like how think and how we go about doing certain things based on our mind and way of thinking so I feel like uhm.. When you are surrounded by different people, groups of people, there is a chance of being influenced by their uhm..Viewpoints and outlooks on life so that could help influence the way we think as well […]"*

Additionally, one participant believed that opportunities available could change intelligence.

Bontle: *" […] yah I think it can be changed overtime obviously because you will illiterate people that grew up in poverty and know you their IQ was what what if they can obviously be funded and get into good schools I think they can higher their intelligence."*

Willingness to learn

Furthermore, several participants' believed that the only way an individual can change their intelligence is through their willingness to learn, hard work and dedication.

Katie: *"Uhm.. you can work around it. Maybe.. cause I feel like intelligence is something were are given and that we have in us but we can always strive to improve it […]"*

Zinhle: *"It is, I feel like it is because uhm.. intelligence also comes with doing your work so if .. for me specifically, if I like focus more on my books like a lot not a lot a lot but yah you know, I did my work proper and everything, it does come in handy."*

Warona: *"I think you can change it, because the more you learn or study something the more you are better at it so if like you are not exercising your mind it won't get used to being used and ilevel (the level) of intelligence yakho (your) I would decrease and mina (I).. okay, if I am getting.. I am usually using my mind to explore things, my level of intelligence around the world changes cause I know I have done this and this and this and in that way my level of intelligence changes so it is possible for a person to change their intelligence like just by reading a lot of books and exploring through the internet, cause there are a lot of thing you can learn through the internet and books."*

Natalie: *"Yah, it is possible if I am willing akere it's all about learning, giving yourself time to learn so yah it's possible if I'm not lazy to learn new stuff then I believe.. lot of things, yah you see things from different perspectives so it does help to become more intelligent, that's what I believe so I believe it is possible like to increase our intelligence by willingness […]"*

Lesego: *"[…] I really do think it is possible for one to pull themselves away from being a below average student and be an above average student because ultimately I do not think there is anything that is that hard if you, you know put in the work […]"*

However, one participant stated that even though a person is willing to work hard, their mental health issues can hinder that willingness.

Jessica: *"[…] I do think it's possible you have to train to work harder and like improve your mind and your intellect but something like that is very difficult for me cause I suffer from*

depression so it makes hard to say like okay today work because some days makes it that I can barely get out of bed so I do think it's possible but it is something that I haven't been able to do."

On the other hand, one male participant is of the notion that it is impossible to change an individuals' intelligence. He expressed that it is only when an individual used to be smart and had their academic performance decline that have the ability to change their intelligence.

Mulalo: *"Oh! I feel like it is highly impossible cause like.. but then it is possible for those who maybe who used to get high marks to get low marks – that one is possible. But then for the people who get average I will say like maybe 2/10 can change to higher marks, that's what I can say."*

Interestingly, these responses indicate that the majority of the participants' ideas have not changed and that they still believe that environment has a key effect when examining both retrospective and current opinions regarding whether intelligence is something that a person can improve or change. These responses might indicate that the participants come from a community where doing well in school was encouraged, which would explain their academic achievements.

4.3.4 Fear of failure

This construct focuses on what the students' attributed the failures they experienced in high school to. Across the participants', two sub-themes of assigning blame and accountability emerged.

Retrospective

Assign blame

This topic focuses on how the participants' would assign blame when they had encountered failure. Several participants' stated that they blamed themselves for the failure.

Jessica: *"I just blamed myself. I would like uhm.. I would blame myself for not being smart enough or not working hard enough but all the blame went to me."*

Mbali: *"Uhm.. if I was failing academically right? It had to be that I was not studying enough or I do not pay attention in class or I was sleeping or eating or talking to a friend, it was along those lines […]"*

Tsholo: *"Thing is sometimes it could me my fault meaning that maybe I didn't stay hard enough or like I knew I had like a test the next day and I was like 'ah I'm lazy, I will pre-study in the morning' so basically – automatically it's my fault cause I didn't.. when I had the opportunity to study I didn't use that time to study and you know properly gain the knowledge and I left everything to last minute so it automatically becomes my fault cause I didn't use that time efficiently for the test."*

Another participant conveyed that at some point she would blame herself for things that were not in her control when there was failure involved.

Lesego: *"[…] and I knew that one was on me because I went into that test unprepared, I was feeling sick before that test and I went there unprepared and I was like 'you know what I'm just gonna write and hope for the best' and I got like a 50something percent and that one I took the blame for cause I was like 'okay that one is on you' […]"*

On the other hand, one participant mentioned that she would attempt to shift the blame.

Tsholo: *"Firstly when I was failing I would call my parents and tell them I am failing so that I have a sense of closer that they know and they know that maybe like it's not my fault even though I knew sometimes it is my fault that I am failing but that is what I would do. I would firstly like tell my parents 'oh I am failing at this and by the way it is not my fault' even though I knew it is my fault […]"*

Moreover, one other participant shared that she would blame her teacher.

Lesego: *"[…] but there were certain tasks where you also like 'I want to take the blame, but is it really my fault though for this one?' type of thing. Uhm.. because there are some of the things where you are like 'certainly this can't be my fault' like uhm.. okay I don't wanna incriminate anyone but there was like a certain teacher of ours who was very yah.. it was just bad and with that I actually saw my studies going down and what's funny is that this person was my teacher for 3 years and in that 3 years the only time I started doing well was in lockdown when I was*

teaching myself the concepts, where I was not face-to-face with this person all the time and that was when I like clearly there has to be something there."

Accountability

This sub-theme examines the participants' feelings when they found themselves in a position where they had failed. Several participants' state that they acknowledged the role they played that ultimately put them in a position to fail. They expressed that failure afforded them the opportunity to reflect on their decisions and try to rectify their mistakes.

Katie: *"Uhm.. probably uhm.. just, I would blame myself. I feel like for any failure I encompassed I would retrace my steps and see what I did that I ended up in this situation and I feel like maybe the first time I wouldn't uhm.. learn from it or just you know think of it as just one set back but if I did see it continuously happening I would and find the root cause of it and uhm.. yah, but I feel like any failure that I would come upon I would think of my future you know in it being distorted now or ruined, yah."*

Katie: *"Uhm.. because I feel like I am responsible for my own actions so if.. whether it was academic failure or just anything in life I know I am the only I can blame because uhm.. there was no one who forced to do anything or forced me to not do something you know, everything was up to me and I feel like if I did encompass failure it would only be upon myself."*

Natalie: *"Yah like I would go like I failed because I didn't give myself time to study – I was lazy, I would be like ah okay I understood these things in class so I don't see the point of studying again because of laziness so yah I was careless and I usually think of the results that would come out my studying because I just thought ah girl you've got this but then sometimes saying you've got this is not that very trust worthy. You just have you like you know.. even if you've got this, you just have to push again, just make sure that you really got it."*

Warona: *"So mina like if I did fail something I wouldn't feel guilty about it I will just say 'it is because I didn't study, next time I will try to study' the I'm way past that cause I knew I can't fail something twice, it just can't happen cause if I know.. cause in maths iprobability (probability) wasn't my strong chapter in mathematics and I know that so whenever I was about to write an exam, I would ask someone I know from my classmate ukuthi (that) he/she is good in probability – I'll ask for their help in like preparing for the examination, in that way whenever I go to the*

exam I have iclearer (a clear) understanding than what than what I had before when I failed something."

In summary, it seems that most participants' accepted accountability and blame for the failure encountered, which had a detrimental impact on their perception of themselves. They began to doubt their abilities and efforts and to be self-critical.

4.3.5 Sense of belonging

This construct focuses on the students' feelings about whether or not they felt like they belonged in their respective high schools.

Retrospective

This theme explored the participants' overall high school career lived experiences.

Familiarity

This sub-theme focuses on how the participants' found navigating their high school lives. Several participants' stated that being familiar with most of their friends from primary school made it easier for them.

Koketso: *"It was not huge deal, in fact in high school I don't think.. cause when I first entered high school the friends I had were like the friend I knew from primary school so I started making new friends in high school when I was like in grade 10, which was not difficult you know."*

Katie: *"The school itself was very accommodative and open and welcome to everyone and I feel like personally because I started there from the very first grade uhm.. I did see it like my second home so I did feel welcome and you know that I belong."*

Bontle: *"In high school uhm.. it wasn't that hard at high school because I already knew.. I already had in ex best friend there, I had my cousin there, I had a neighbor that I knew there so it wasn't that had."*

Botlhale: *"[…] my cousin and I have been together since childhood, we grew up in the same house, we went to the same primary, we were in the same class in primary, we went together to the same high school so like I can say we will be together for the rest of our lives so making*

friends for me.. every time I try to make friends she'll remind me that 'do not be too close with them and forget that I am here' (laughs) you see that thing?[…]"

Mbali: *"There was no difficulty at all cause the friends that I came with from my previous primary school so I would hang out with them at break time or hang out with other people in uhm.. when we were in the class […]"*

One participant expressed that having her school close to her home made it easier for her because it did not feel like a completely different environment.

Zinhle: *"No I didn't at any point, cause I knew most of the people who went to the school because it was close to home so it wasn't a different environment to put it like that."*

Two more participants conveyed that valuing their long-term friendships was pivotal for them in high school.

Warona: *"[…] I don't like having too many friends so whenever you are my friend, we are friends forever and most of the people I am friends with, they are the people I grew up with."*

Lesego: *"[…] I've had the same best friend since like late grade 8, well same 2 best friends and one of them was early grade 8 actually and then of it was late grade 9 cause she only joined our school like we started knowing each other around then so I really would say I was lonely, no."*

Lack of belonging

This sub-theme explores the negative feelings that participants' had towards their high school years. Some participants' expressed that there were times when feeling like they do not belong bothered them however there were also times when they did not care about belonging. Nevertheless, when they did feel bothered, participants' stated that the fact that they did not belong made them feel sad.

Mbali: *"Yah! I did, I really did a lot and that did like hurt me a lot of times like I would prefer to be.. if I wasn't with a small group of friends or if I couldn't find them during break time, I would always be in the teachers class spending break time with her. So being an outcast it was.. I was known for it and sometimes I cared and sometimes I didn't."*

Mbali: *"Like I would feel sad cause eh.. in high school there was always this group that would be a group of boys and a group of girls and some from my class and some from other classes and then I would find that I can't like uhm.. sit into any group uhm.. I'd feel sad, I would immediately feel sad and wanna cry and like go home but I couldn't so I would just sit alone until break ended and then I would go back to class."*

Tsholo: *"It made me feel sad like most of the time like depressed I'm not going to lie so yah it just didn't make me feel really good I just felt bad and sad of like 'ohhh this is the life you are living' basically I pitied myself on a weekly basis."*

Jessica: *"Yah! I did feel quite lonely because uhm.. I also think within my friendship group it was a lot for them to get along with each other then it was to get along with me because we were quite different so I just did feel lonely because I felt everyone else was closer with each other than they were to me."*

Furthermore, four female participants' stated that they had difficulty relating with their peers.

Tsholo: *"Before meeting Lindi I would feel lonely cause I felt like nobody fully got me or understood the type of person I am or catch my vibe or my flow so I did feel lonely cause I was also suffering to a different type of depression but yah and I just felt lonely because I wasn't understood or like people didn't get me or like my vibe."*

Katie: *"Sometimes I did feel like an outsider uhm.. usually when I was with a group of people and maybe the most.. well the most common experience was when uhm..everybody will be talking about a certain subject that maybe I didn't take or they were speaking in another language, I would just find myself kind of like as an outsider, not really knowing what to do […]"*

Jessica: *"It was really closely linked to the points of me feeling like I don't belong uhm.. so that made me feel very out of place cause I couldn't really resonate with the people in my school cause they were not from the kind of background as me."*

On the other hand, another participant expressed they felt like they belonged at high school and the reason for that was largely because they were part of something.

Koketso: *"Okay, yes – yes, I feel like I belonged in high school cause it was fun at school, it was like a culture, a tradition to me by going to high school cause I enjoyed being at school so yah I enjoyed being around my classmates, like I just loved being at school so I could say that yah I belonged at high school. Eish.. what I loved most about that school like it was like things like heritage day when we go to perform our traditional dance that when I saw like yah I do belong here cause it will be massive, we will perform and the crowed would be making noise you know."*

Furthermore, the participants' expressed how they feel about their socioeconomic status. Several of them expressed that at some point they started to compare the SES backgrounds with their peers and that resulted in them acknowledging that they were different and as a result, they felt like they did not belong.

Natalie: *"My friends do not come from a poor background like I do yah like I do, theirs are better so yah they were able to afford things that I could not afford so that would make me feel left out and when I felt left out I would like move away from those people and I know it was bad but then I just didn't like the feeling of being left out"*

Natalie: *"[…] point I felt like I don't belong in that particular group of friends because yah of the things I didn't have and they had so it was very awkward for me […]"*

Mulalo: *"[…] when I wanted to engage myself in the extra lessons because the rest my friends they used to attend the extra lessons but then because me I could not afford one I never attended one so like that is when I started to see the difference between me and my friends[…]"*

Jessica: *"[…] the high school I went to was kind of like a rich area, uhm.. so majority of my friends were like from wealthy families but I wasn't.. well I'm not.. uhm.. like for high school I was on, I'm not sure what it's called but it was a financial aid type of thing uhm.. and it was like I could never let my friends find out about this because I would just be like too embarrassed cause they were all from like very wealthy families and I was like not, we came from very different backgrounds. I did feel left out very often."*

The response suggests that the participants' perception of the self was positively impacted by their familiarity with the people and environment, which helped them feel more confident about

navigating through high school. However, because of the SES differences between the participants' and their peers, they became more isolated and their confidence declined.

Conclusion

The research demonstrated that the lived experiences of self-perception in high achieving students' that come from a low SES background are both individualised and similar. The findings revealed that validation which was distributed between internal (self-belief) and external (affirmations from external sources) played a significant role in the students' academic success. Furthermore, the data also demonstrated that the perception of intelligence is largely influenced by what the students' observe from their different environments.

Chapter 5: Discussion and conclusion

Discussion

This study aimed to understand the lived experiences and processes involved in self-perception of high-achieving university students' from a low SES background. To accomplish the aim of the study, twelve first-year students' were recruited to participate and semi-structured interviews that were distributed between retrospective (high school) and current (university) accounts were conducted. The questionnaire focused on self-perception in relation to academic achievement. To analyse the data, a two-step process was implemented. First, a general thematic analysis was conducted to look at the general themes that emerged overall. Two primary themes emerged in terms of self-perception – validation and socialisation, with sub-themes of internal and external validation, as well as introversion and extroversion. Second, an additional thematic analysis was conducted on each of the five self-perception constructs. Self-doubt, confidence in abilities, assign blame and external environment are some of the themes that emerged amongst others. The findings are discussed in relation to the literature below:

Validation

The findings of this study appear to reveal the importance of validation for the students'. An equivalent need for both external and internal validation was described in the findings. While the participants' had showed characteristics of internal validation, it seems that during the process of self-motivation and self-belief, participants' needed reassurance from external sources. Nonetheless, participants' expressed both the negative and positive characteristics of self-perception they had retrospectively. These perceptions ranged from self-doubt to confidence. Despite the challenges the participants faced as a consequence of their SES background, all of them expressed that feeling validated helped them succeed academically and gain acceptance in some of the best universities in South Africa.

Literature has revealed that a child's sociocultural factors and lived experiences play a fundamental role in their contingencies of self-worth and self-validation (Crocker et al. 2006). According to (Mulins, 2018) internal validation refers to the process by which a person develops

a sense of worth based on their own perception, on the other hand, when a person receives their sense of self-worth from other sources, they are said to be receiving external validation. In this study, the semi-structured interviews revealed that receiving external validation and the possession of sense of worth has substantial influence on the academic self-perception of the participants' and their achievement. Hurtado & colleagues (2011) explain that validation is regarded as an important concept for disadvantaged students' academic achievement. Munoz & Linares (2011) further explain contrary to popular believe, validation is not about cosseting students', however, validation aims to strengthen the students' by encouraging them to develop a sense of self-worth, trust in their abilities to study and boost their will to succeed.

Socialisation

Socialisation is one of the key determinants of an individual's self-perception (Queiroz et al. 2020). Research has shown that how parents socialise their children in early childhood and adolescence can have a lasting impact on their development and perception of the self (Dorsey, 1989). According to Baumeister et al. (2003) the esteem that students' have of themselves is important for learnings, motivation and school performance. Epstein (1982) Explains that high self-esteem creates confidence in an individual's abilities.

Through socialisation individuals develop beliefs about themselves, about their abilities and their value in the world (Queiroz et al. 2020; Dorsey, 1989), which can lead to high or lower levels of self-esteem and confidence (Tuovineni, 2019). In this study, the responses illustrate that there was a clear difference between how more extroverted and introverted participants' navigated through high school. The participants' accounts are consistent with Tuovineni (2019), introverted participants' were self-critical, had self-doubt which influenced their confidence level and self-perception. On the other hand, extroverted participants' expressed that they were liked by a lot of their peers and they had a positive self-concept, as well as being able to assist to their peers with school work.

Self-doubt

Hermann et al. (2002) defined self-doubt as how a certain person feels about important abilities, having an in-depth understanding of how the students' feel about their abilities to perform important tasks and succeed could be significant in understanding how their self-perception impacts their academic performance. In this study, the responses illustrate that although the participants' experienced self-doubt in high school, self-doubt seemed to heighten in university. As a result, it impacted how they described and perceived themselves academically. According to Oleson et al. (2000), self-doubt and self-esteem are moderately and negatively correlated. In a study conducted by Hermann et al. (2002) that aimed to investigate the impact of self-esteem in enhancing self-doubt, it was shown that self-doubt is associated with self-esteem, with a person's overall self-esteem decreasing with an increase in self-doubt.

In this present study however, the retrospective accounts of the participants' in relation to self-doubt suggest that the participants' self-doubt did not negatively impact their self-perception, participants' described that in high school, self-doubt helped them take initiative to improve their abilities by taking extra lessons, spending time with teachers and using external sources of academic support, such as YouTube to acquire more knowledge. However, that was not the case for current accounts in the interviews. Participants' responses suggest that their self-doubt impacted how they perceived their academic abilities referring to themselves and their performances as average. The results for current accounts are consistent with finding by Hermann (2022), specifically, that the feelings of self-doubt causes threats to emerge on self-esteem, and possibly more boarding, self-perception.

Confidence in abilities

Previous literature suggest that there is a correlation between SES background and reading abilities (Bunkingham et al, 2013). In addition, a study conducted by Kieffer (2012) revealed that in the early years of school, children from a low SES background faced difficulty reading compared to children from middle and high SES backgrounds, however, a gradual change was evident as the children progressed in grades. In this study, when asked about their self-perceived reading abilities, several participants' mentioned that they do not consider reading as enjoyable

or find any interest because of their limited attention span and as a result, their confidence in their abilities is affected. The participants' accounts are consistent with the findings of research conducted by Wigfield & Eccles (2000) that postulate that reading motivations cannot solely be understood in relation to cognitive competencies, but the development of reading should be taken into consideration. Wigfield & Guthrie (1997) further explains that self-perception of reading ability and enjoyment encourages students to involve themselves in reading activities.

Furthermore, a handful of participants' in this current study who were confident about their self-perceived reading abilities attributed the confidence and the love of reading to comprehension amongst other things. According to Corso et al. (2015) reading comprehension is not reliant solely on internal factors such as cognitive ability, as well as external factors such as learning environment and frequent reading plays a critical role. Oleveira et al. (2008) asserts that reading comprehension has a direct impact on academic performance because it helps to improve and manage school content gathered from a range of knowledge disciplines. Furthermore, Bzuneck & Oleveira (2012) pointed out that students' who have positive self-perception convey confidence in their academic competencies such as their ability to comprehend the content.

Assign blame

Martin & Marsh (2003) explain that for some students', fear of failure can be a motivating factor to strength their individual drive and help them with academic resilience and exceptional academic performance. However, when their hard work is not reflected by their grade evaluations, this can cause setbacks and validate the self-doubt that they might have (Martin, 2001), as a result, students' create attributions to explain their academic performances (Forsyth, 1986).

Attribution theory explains how individuals perceive the cause of their own behaviour (Rotter, 1966). Forsyth (1986) explains that there is a distinct difference in attribution after success and failure, after failing students' are more likely to highlight the external causes, on the contrary, when students' succeed, they are more likely to put significance on internal factors. For instance, a study conducted by Kovenklioglu & Greenhaus (1978) revealed that high performing students'

attributed their achievement to ability and effort compared to low performing students' who attributed the failure to bad luck and the difficulty of the test.

Borges & Santos (2016) explain that the students' that have poor academic performances can express feelings of guilt, shame and worthlessness. In this study, after failing, participants' explained that they assign blame to themselves with feelings ranging from feeling like they are not smart enough, not studying enough, not paying adequate attention in class and being lazy. Augoustinos (2005) asserts that to avoid negative emotions that are associated with failure, people will most likely attribute the failure to external locus of control. However, this finding is inconsistent with the participants' accounts in this study which depicted that they attribute failure to themselves. Nevertheless, Damiani & Shelton (2002) postulate that efforts must be put in changing students' attribution style because they assert that it can help reduce self-blame amongst students, thus, lowing poor performance. In this study, participants' mentioned that they would attribute failure to their teachers, this finding is consistent with Lemeneh (2020) findings who depicted that students' will attribute failure to external factors such as the teachers inability to teach and learning facilities. According to Forsyth (1986) students' attribute failure to external factors with the aim of protecting their academic self-perception.

Furthermore, several participants' attributed failure to self-blame and further took accountability and as a result, the participants' mentioned that they would put more effort in their studies as an attempt to avoid future failure. This is consistent to the findings by Lemeneh (2020) who explained that students' who internalise failure are likely to work harder.

External environment

Previous research postulates that exploring the influence that the environment has on intelligence plays a role in understanding the impact of people's backgrounds in intelligence quotient (IQ) test results as well as additional tests of cognitive ability (Nagpal et al., 2015). Nagpal et al. further explains that genes are considered to provide about 20-40% of the variance in intelligence in childhood. However, it is expected that intelligence will remain constant in early adulthood (Deary, 2000). Moreover, research shows that genes start to actively play a role during middle to old age, the significance of the environment becomes less important.

As observed in the interview responses, most of the emphasis was put on the external environment and was identified as a factor on the understanding that intelligence is not fixed. In both the retrospective and current accounts, majority of the participants' mentioned that how education is prioritised in an individual's immediate environment plays a significant role. In this study, a participant mentioned that opportunities available to students' could change intelligence. Additionally, (Deary, 2001) asserts that the influence the education environment continues to be quite significant.

In this current study, another participant explained that the environment he grew up in was full of crime and he was surrounded by people who did not take education seriously. However, since moving to university accommodation, he has noticed the change in his intelligence because of the different mindsets that his new friends have, therefore it is difficult for students' especially in their adolescent stage to develop a different mindset and belief system separate from people in his or her immediate environment. Ceka & Murati (2016) argue that in different family environments, children obtain different experiences by getting involved in multiple activities and by frequently being exposed to various expectations and influences from the people he or she co-exists with. Furthermore, Ceka & Murati explain that the majority of the time when parents immerse themselves in their children's education, the results are positive and motivating. In this regard, they frequently collaborate and act in accordance with their own parental attitudes which are communicated through their display of reciprocal discretion with regard to the children's abilities and overall learning abilities, aiding them to succeed in learning, education and intellectual improvement as a difficult process. Therefore, the findings of this study allude to the fact that participants' perception of intelligence is largely influenced by what they observe from their different environments.

This study was guided by the Ecological Systems Theory and validation which was distributed between internal (self-belief) and external (affirmations from external sources) played a significant role in the students' academic success. Validation is an important component of the ecological systems theory. According to Urie Bronfenbrenner, an individual's development is influenced by a complex interplay of various systems, including the microsystem, mesosystem, exosystem, and macrosystem. Each system plays a crucial role in shaping the individual's lived experiences and eventually their development (Crocker et al. 2006). Validation is imperative in

promoting positive development within the systems. When individual's feel validated, they are more likely to have positive outcomes, experience positive interactions within their systems, and build resilience Munoz & Linares (2011). Therefore, validation is a crucial aspect of promoting positive outcomes and development within the ecological system theory.

5.1 Implication of the study

This study adds to our understanding of self-perception and educational attainment. It further helps in understanding the lived experiences of students' from a low SES background and the difficulties they encounter with self-perception in pursuit of educational attainment, which can give awareness into how teachers, friends and family can support them, as well as the wider institutional support needed.

The lived-experiences described in this study show that future research should direct its focus on the dual impact of external support and self-belief in students'. Subsequently, future research should explore various interventions that would accommodate the psychological needs of students from a low SES background. Future research could also focus on the gender differences in self-perception. This study also highlights the need for more qualitative research on topics around educational inequalities, to help unpack and understand the complex relationship between educational attainment and the lived-experiences of students'.

5.2 Limitations

This study has various strengths, however the study's limitations should be acknowledged. First, the sample size is plausibly small, nevertheless, data sufficiency and saturation was arguably achieved with a sample size of 12. The faculties and male-to-female ratio may limit the ability to achieve data saturation because majority of the participants' were female, with only three males and majority of the participants' were registered in the Faculty of Humanities, with only three spilt between the faculty of Engineering and CLM. Having a greater diversity of faculties

represented and a more balanced gender distribution is therefore needed for future studies, however, even though the variety and distribution was not accomplished in this regard, the sample used still provided a rich understanding of the lived-experiences of high achieving students' coming from a low SES background. In addition, the questionnaire was arguably too structured, future studies could consider using more open-ended questions at the start of the interview before filtering to more specific self-perception-related questions. For example, 'tell me about your experience of high school' to see if the concept of self-perception emerged naturally during the course of the interview. Moreover, all the participants' asked for the interviews to be conducted online, which is an interesting finding itself. However, current research is not clear on the difference in conducting online compared to in-person interviews and the potential differences in establishing the needed rapport with participants see (Lobe, Morgan & Hoffman 2022).

5.3 Reflexivity

Prior to conducting the first few interviews, I felt nervous. I felt nervous because I was afraid that I might manipulate the interviews by subconsciously imposing my views and experiences to the participants. However, prior to all the interviews I reminded myself that the participants stories are not mine to know and I consciously put myself in the 'not knowing position'.

The themes that came out and that I can relate to are help-seeking and validation. I relate most to these two themes because personally, I believe that they play a crucial role in success. Seeing for help when needed and accepting that no man is an island contributed to where I am today. Sometimes as people we tend to think that we are not good enough for certain things, for instance, for the longest time I felt like I am not good enough to be a Masters candidate, let alone a Wits student, as a result, my coursework work was affected. I, however, had to constantly and actively validate myself and do daily mantras to remind myself that I belong and I am here because I qualify to be here and in doing so, seeking for help and validating myself, I was able to push through the self-doubt.

In conclusion, conducting these interviews as a black female who was born and bred in the township and who comes from a low SES background made me realise that students from a low SES background although we have different upbringings, we share the need to want to make something for ourselves and be independent.

5.4 Conclusion

In conclusion, the purpose of this study was to gain an in-depth understanding of the lived experiences of self-perception in a sample of high-achieving students' that come from a low SES background. To the best of my knowledge, only one survey-based study (Ochse, 2003) has looked at self-perception and education utilising purely descriptive survey methodology. Studies that used qualitative methodology to explore and document lived experiences of students' educational attainment in relation to their self-perception are not yet recorded.

This study demonstrated that the experiences of students' self-perception and educational attainment, both in high school and university, although similar, there are a number of differences. Participants' expressed different feelings regarding the importance of validation in their academic success depending on current experience of university or retrospective accounts of high-school. Furthermore, the participants' lived experiences throughout high school affected their self-perception differently based on their ability to socialise. However, these differences had a common factor, specifically, both external and internal sources played a significant role in the participants' self-perception and educational attainment.

There is an education crisis in South Africa and arguably more generally, in many LMIC. There is not a clear understanding why students' perform differently and what the role of self-perception is in combating education inequalities. The results of the study however, have shown that qualitative methods that draw on the lived-experiences of students can be a powerful methods to unlock the complex relationship between psychological and external factors that contribute to educational attainment in low-income contexts. Similar studies can be drawn on to develop more meaningful and individualised interventions – in schools, universities and with families - to help combat educational inequalities.

References

Adams, R. J., Wu, M., Programme for International Student Assessment, & Organisation for Economic Co-operation and Development (Eds.). (2002). *PISA 2000 technical report*. OECD.

Agasisti, T., & Longobardi, S. (2017). Equality of Educational Opportunities, Schools' Characteristics and Resilient Students: An Empirical Study of EU-15 Countries Using OECD-PISA 2009 Data. *Social Indicators Research*, *134*(3), 917–953. https://doi.org/10.1007/s11205-016-1464-5

Anderson, E. K. . (2017). A Study Looking at How Youth' s Self- P erception is Affected by Their T emperament. *Undergraduate Honors Theses.*, *Paper 408*.

Anthony, D. B., Wood, J. V., & Holmes, J. G. (2007). Testing sociometer theory: Self-esteem and the importance of acceptance for social decision-making. *Journal of Experimental Social Psychology*, *43*(3), 425–432. https://doi.org/10.1016/j.jesp.2006.03.002

Azeez, A., & Dubey, A. (n.d.). *Moderating Role Of Self-Esteem In Distress And Cognitive Distortions Relationship Among Marginalized Adolescents*. 14.

Bandura., Albert. (1997). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–213.

Barbouta, A., Barbouta, C., & Kotrotsiou, S. (2020). *Growth Mindset and Grit: How Do University Students' Mindsets and Grit Affect their Academic Achievement?* 11.

Barro, R. J. (2013). Education and Economic Growth. *Harvard University.*, *14–2*, 301–328.

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003a). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles? *Psychological Science in the Public Interest*, *4*(1), 1–44. https://doi.org/10.1111/1529-1006.01431

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003b). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles? *Psychological Science in the Public Interest*, *4*(1), 1–44. https://doi.org/10.1111/1529-1006.01431

Bell, B. T. (2016). Understanding Adolescents. In L. Little, D. Fitton, B. T. Bell, & N. Toth (Eds.), *Perspectives on HCI Research with Teenagers* (pp. 11–27). Springer International Publishing. https://doi.org/10.1007/978-3-319-33450-9_2

Beluce, A. C., Inácio, A. L. M., Oliveira, K. L. de, & Franco, S. A. P. (2018). Reading Comprehension and Self-Perceived School Performance in Elementary School. *Psico-USF*, *23*(4), 597–607. https://doi.org/10.1590/1413-82712018230401

Bem, D. J. (1972). Self-perception theory. *Academic Press, Inc.*, *6*, 1–32.

Berry, L., & Guthrie, T. (2003). *rapid assessment: The situation of children in South Africa*.

Bhana, A., & Bachoo, S. (2011). The Determinants of Family Resilience among Families in Low- and Middle-Income Contexts: A Systematic Literature Review. *South African Journal of Psychology*, *41*(2), 131–139. https://doi.org/10.1177/008124631104100202

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, *78*(1), 246–263. https://doi.org/10.1111/j.1467-8624.2007.00995.x

Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2008). Does adolescent self-esteem predict later life outcomes? A test of the causal role of self-esteem. *Development and Psychopathology*, *20*(1), 319–339. https://doi.org/10.1017/S0954579408000151

Boeree, G. C. (2006). *Personality theories*. http://webspace.ship.edu/cgboer/maslow.html

Bong, M., & Clark, R. E. (1999). Comparison between self-concept and self-efficacy in academic motivation research. *Educational Psychologist*, *34*(3), 139–153. https://doi.org/10.1207/s15326985ep3403_1

Borges, L., & dos Santos, AAA, A. (2016). intomatología depresiva y desempeño escolar: Un estudio con niños brasileños. *Ciencias Psicológicas, 10(2)*, 189-197.

Bosacki, S. L. (2014). *A Longitudinal Study of Children's Theory of Mind, Self-Concept, and Gender-Role Orientation*. *2*, 16.

Bouchey, H. A., & Harter, S. (2005). Reflected Appraisals, Academic Self-Perceptions, and Math/Science Performance During Early Adolescence. *Journal of Educational Psychology*, *97*(4), 673–686. https://doi.org/10.1037/0022-0663.97.4.673

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brummelman, E., & Thomaes, S. (2017). How Children Construct Views of Themselves: A Social-Developmental Perspective. *Child Development*, *88*(6), 1763–1773. https://doi.org/10.1111/cdev.12961

Buckingham, J., Wheldall, K., & Beaman-Wheldall, R. (2013). Why poor children are more likely to become poor readers: The school years. *Australian Journal of Education*, *57*(3), 190–213. https://doi.org/10.1177/0004944113495500

Cappella, E., & Weinstein, R. S. (2001). Turning around reading achievement: Predictors of high school students' academic resilience. *Journal of Educational Psychology*, *93*(4), 758–771. https://doi.org/10.1037/0022-0663.93.4.758

Ceka, A., & Murati, R. (2016). The Role of Parents in the Education of Children. *Journal of Education and Practice*.

Chevalier, A., Gibbons, S., Thorpe, A., Snell, M., & Hoskins, S. (2007). *Students' Academic Self-Perception*. 45.

Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, *113*(31), 8664–8668. https://doi.org/10.1073/pnas.1608207113

Das, D. (2019). Academic Resilience Among Children from Disadvantaged Social Groups in India. *Social Indicators Research*, *145*(2), 719–739. https://doi.org/10.1007/s11205-018-1899-y

Das-Brailsford, P. (2005). *exploring resiliency: Academic achievement among disadvantaged black youth in South Africa.* 574-591.

David, B., & Resnik, J. D. (2008). *What is ethics in research and why is it important. 8*(8).

De Clercq, F. (2020). The Persistence of South African Educational Inequalities: The Need for Understanding and Relying on Analytical Frameworks. *Education as Change*, *24*. https://doi.org/10.25159/1947-9417/7234

de Wet, C., Wolhuter, C., & North-West University. (2009). A transitiological study of some South African educational issues. *South African Journal of Education*, *29*(3), 359–376. https://doi.org/10.15700/saje.v29n3a272

Deary, I. J. (2000). *Looking down on human intelligence: From psychometrics to the brain*. Oxford University Press.

Deary, I. J. (2020). *Intelligence: A very short introduction* (Second edition). Oxford University Press.

Denzin, N., & Lincoln, Y. (2002). *The Qualitative Inquiry Reader*. SAGE Publications, Inc. https://doi.org/10.4135/9781412986267

Department of Basic Education. (2018). *Education Statistics in South Africa 2016*. the Department of Basic Education.

Dey, P., & R., B. D. (2019). The Effect of Resilience on the Psychological Well Being of Orphan and Non-Orphan Adolescents. *Indian Journal of Mental Health*, *6*(3), 253. https://doi.org/10.30877/IJMH.6.3.2019.253-260

Dirk Van Damme. (2001). Quality issues in the internationalisation of higher education. *Kluwer Academic Publishers*, *41*, 415–441.

Dorn, L. D., & Biro, F. M. (2011). Puberty and Its Measurement: A Decade in Review: PUBERTY AND ITS MEASUREMENT. *Journal of Research on Adolescence*, *21*(1), 180–195. https://doi.org/10.1111/j.1532-7795.2010.00722.x

Dorsey, B. J. (n.d.). *WORKING PAPER NUMBER 3 June 1989*.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087–1101. https://doi.org/10.1037/0022-3514.92.6.1087

Enrollment Management Journal, Summer 2011. (2011).

Epstein, S. (n.d.). *WHAT IS SELF-ESTEEM'AND,HOW CAN IT BE MEASURED?*

Erikson, E. H. ,., & Erikson, J. M. (1997). *The life cycle completed.*

Eskreis-Winkler, L., Shulman, E. P., Beal, S. A., & Duckworth, A. L. (2014). The grit effect: Predicting retention in the military, the workplace, school and marriage. *Frontiers in Psychology*, *5*. https://doi.org/10.3389/fpsyg.2014.00036

Flanagan, D. P., Alfonso, V. C., Mascolo, J. T., & Hale, J. B. (2010). *The Wechsler Intelligence Scale 30 for Children–Fourth Edition in Neuropsychological Practice*. 20.

Fleming, J. (2018). *Methodologies, methods and ethical considerations for conducting research in work-integrated learning*. 13.

Forsyth, D. R. (n.d.). *An Attributional Analysis of Students' Reactions to Success and Failure*.

Gizir, C. A., & Aydin, G. (2009). Protective Factors Contributing to the Academic Resilience of Students Living in Poverty in Turkey. *Professional School Counseling*, *13*(1), 2156759X0901300. https://doi.org/10.1177/2156759X0901300103

Harry, B., & Lipsky, M. (2014). *Qualitative research on special education teacher preparation.* 445–460.

Harter. (2003). *The development of self-representations during childhood and adolescence.* (In M.R. Leary, J. P. Tangney (Eds)).

Heberle, A. E., & Carter, A. S. (2015). Cognitive aspects of young children's experience of economic disadvantage. *Psychological Bulletin*, *141*(4), 723–746. https://doi.org/10.1037/bul0000010

Hepper, E. G. (2016). Self-Esteem. In *Encyclopedia of Mental Health* (pp. 80–91). Elsevier. https://doi.org/10.1016/B978-0-12-397045-9.00076-8

Hermann, A. D., Leonardelli, G. J., & Arkin, R. M. (2002). Self-Doubt and Self-Esteem: A Threat from within. *Personality and Social Psychology Bulletin*, *28*(3), 395–408. https://doi.org/10.1177/0146167202286010

Hochanadel, A., & Finamore, D. (2015). Fixed And Growth Mindset In Education And How Grit Helps Students Persist In The Face Of Adversity. *Journal of International Education Research (JIER)*, *11*(1), 47–50. https://doi.org/10.19030/jier.v11i1.9099

Hofer, S., Heine, J., Besharati, S., Yip, J., Reinhold, F., & Brummelman, E. (2023). *Self-Perceptions as Mechanisms of Achievement Inequality: Evidence Across 70 Countries* [Preprint]. In Review. https://doi.org/10.21203/rs.3.rs-2534957/v1

Howie, S., Combrinck, C., Tshele, M., Roux, K., Palane, N. M., Mokoena, G., University of Pretoria, Centre for Evaluation and Assessment, Progress in International Reading Literacy Study, South Africa, & Department of Basic Education. (2018). *PIRLS 2016: Progress in International Reading Literacy Study 2016 : South African children's reading literacy achievement*.

Hurtado, S., Cuellar, M., & Guillermo-Wann, C. (2011). *Quantitative Measures of Students' Sense of Validation: Advancing the Study of Diverse Learning Environments*.

Kawamoto, T., Ura, M., & Nittono, H. (2015). Intrapersonal and interpersonal processes of social exclusion. *Frontiers in Neuroscience*, *9*. https://doi.org/10.3389/fnins.2015.00062

Kenya National Bureau of Statistics. (2017). *Economic Survey 2017*.

kieffer, M. J. (2012). Before and after third grade: Longitudinal evidence for the shifting role of socioeconomic status in reading growth. *Reading and Writing*, *25*, 1725–1746.

Kong, K. (2020). *Academic Resilience of Pupils from Low Socioeconomic Backgrounds*. *15*(2), 70–89.

Kovas, Y., Haworth, C., M. A., Dale, P., S., & Plomin, R. (2007). The Genetic and Environmental Origins of Learning Abilities and Disabilities in the Early School Years School Years. *Monographs of the Society for Research in Child Development*, *72*(3), vii–vii. https://doi.org/10.1111/j.1540-5834.2007.00453.x

Kovenklioglu, G., & Greenhaus, J. H. (1978). Causal attributions, expectations, and task performance. *Journal of Applied Psychology*, *63*(6), 698–705. https://doi.org/10.1037/0021-9010.63.6.698

Leary., M. R., & Baumeister, R. F. (n.d.). The nature and fuction of Self-esteem: Sociometer theory. *Academic Press, Inc.*, *32*, 1–62.

Lemeneh, T. A. (2020). *Perceived High School Students' Attribution of Academic Success and Failure in East Gojjam Zone*. *11*(5).

Liu, Q., Jiang, M., Li, S., & Yang, Y. (2021). Social support, resilience, and self-esteem protect against common mental health problems in early adolescence: A nonrecursive analysis from a two-year longitudinal study. *Medicine*, *100*(4), e24334. https://doi.org/10.1097/MD.0000000000024334

Lobe, B., Morgan, D. L., & Hoffman, K. (2022). A Systematic Comparison of In-Person and Video-Based Online Interviewing. *International Journal of Qualitative Methods*, *21*, 160940692211270. https://doi.org/10.1177/16094069221127068

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development*, *71*(3), 543–562. https://doi.org/10.1111/1467-8624.00164

Malindi, M. J. (2014). Exploring the Roots of Resilience among Female Street-involved Children in South Africa. *Journal of Psychology*, *5*(1), 35–45. https://doi.org/10.1080/09764224.2014.11885503

Mampane, R., & Bouwer, C. (2011). The influence of township schools on the resilience of their learners. *South African Journal of Education*, *31*(1), 114–126. https://doi.org/10.15700/saje.v31n1a408

Mann, M. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research*, *19*(4), 357–372. https://doi.org/10.1093/her/cyg041

Martin, A. J., & Marsh, H. W. (2003). Fear of failure: Friend or foe? *Australian Psychologist*, *38*(1), 31–38. https://doi.org/10.1080/00050060310001706997

Mascall, D. (2000). *The development of the self-concept in the young child*. https://doi.org/10.15760/etd.5590

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/h0054346

Masten, A. (2012). Resilience in children: Vintage rutter and beyond. In A.M Slatter and P.C Quinn, eds. *London: Sage Publications, Ltd.*, 204-221.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227–238. https://doi.org/10.1037/0003-066X.56.3.227

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, *85*(1), 6–20. https://doi.org/10.1111/cdev.12205

Mataka, T. W., Mukurunge, T., & Bhila, T. (2020). *LANGUAGE IN EDUCATION POLICY: A BARRIER TO ACADEMIC AND COGNITIVE DEVELOPMENT OF LEARNERS ACROSS GRADES: A CASE OF SOUTH AFRICAN TEACHERS' NARRATIVES*. *2*(1), 9.

McClure, A. C., Tanski, S. E., Kingsbury, J., Gerrard, M., & Sargent, J. D. (2010). Characteristics Associated With Low Self-Esteem Among US Adolescents. *Academic Pediatrics*, *10*(4), 238-244.e2. https://doi.org/10.1016/j.acap.2010.03.007

McKeever, M. (2017). Educational Inequality in Apartheid South Africa. *American Behavioral Scientist*, *61*(1), 114–131. https://doi.org/10.1177/0002764216682988

Meškauskienė, A. (2017). The Impact of Teaching Environment on Adolescent Self – esteem Formation. *European Journal of Social Sciences Education and Research*, *10*(1), 112. https://doi.org/10.26417/ejser.v10i1.p112-120

Mohebi, L., & Bailey, F. (2020a). Exploring Bem's Self Perception Theory in Educational Context. *Encyclopaideia*, 1-10 Pages. https://doi.org/10.6092/ISSN.1825-8670/9891

Mohebi, L., & Bailey, F. (2020b). Exploring Bem's Self Perception Theory in Educational Context. *Encyclopaideia*, 1-10 Pages. https://doi.org/10.6092/ISSN.1825-8670/9891

Mullin, R. (2018, June 4). *Balancing internal and external validation.* https://rachelmullinscounseling.com/2018/06/04/balancing-internal-and-external-validation/

murray leibbrandt & james levisohn. (2011). *fifteen years on: Household incomes in south africa*.

Nagpal, M. J., Arora, M. K., & Nagpal, D. B. (2015). *Environment and Intelligence: A Correlation*. *2*(11), 107–112.

Ndimande, B. S. (2016). *School Choice and Inequalities In Post-Apartheid South Africa*. *3*(2), 17.

Negovan, V., & Bagana, E. (2011). A comparison of relationship between self esteem and vulnerability to depression among high school and freshmen university students. *Procedia - Social and Behavioral Sciences*, *30*, 1324–1330. https://doi.org/10.1016/j.sbspro.2011.10.257

Nguyen, D. T., Dedding, C., Pham, T. T., Wright, P., & Bunders, J. (2013). Depression, anxiety, and suicidal ideation among Vietnamese secondary school students and proposed solutions: A cross-sectional study. *BMC Public Health*, *13*(1), 1195. https://doi.org/10.1186/1471-2458-13-1195

Nguyen, D. T., Wright, E. P., Dedding, C., Pham, T. T., & Bunders, J. (2019). Low Self-Esteem and Its Association With Anxiety, Depression, and Suicidal Ideation in Vietnamese Secondary School Students: A Cross-Sectional Study. *Frontiers in Psychiatry*, *10*, 698. https://doi.org/10.3389/fpsyt.2019.00698

Ochse, C. (2003). Are positive self-perceptions and expectancies really beneficial in an academic context? *South African Journal of Higher Education*, *17*(1), 67–73. https://doi.org/10.4314/sajhe.v17i1.25194

Oleson, K. C., Poehlmann, K. M., Yost, J. H., Lynch, M. E., & Arkin, R. M. (2000). Subjective Overachievement: Individual Differences in Self-Doubt and Concern With Performance. *Journal of Personality*, *68*(3), 491–524. https://doi.org/10.1111/1467-6494.00104

Oliveira, K. L. de, Boruchovitch, E., & Santos, A. A. A. dos. (2008). Leitura e desempenho escolar em português e matemática no ensino fundamental. *Paidéia (Ribeirão Preto)*, *18*(41), 531–540. https://doi.org/10.1590/S0103-863X2008000300009

Oliveira, K., Bzuneck, J., & Rufini, S. (2012). A qualidade da motivação em estudantes do ensino fundamental. *Paidéia, 22(51)*. http://www.scielo.br/pdf/paideia/v22n51/07. pdf

Ordaz-Villegas, G. (n.d.). *Development of an academic self concept for adolescents (ASCA) scale*. *5*(2).

Park, L. E., Crocker, J., & Vohs, K. D. (2006). Contingencies of Self-Worth and Self-Validation Goals. *Guilford Publications*, 84–98.

Paulus, Lena., Spinath, F., M., & Hahn, E. (2021). How do educational inequalities develop? The role of socioeconomic status, cognitive ability, home environment, and self-efficacy along the educational path. *Elsevier Inc.*, *86 (C)*. https://doi.org/10.1016/j.intell.2021.101528

Peppler, K. A. (Ed.). (2017). *The Sage encyclopedia of out-of-school learning*. SAGE Publications, Inc.

Petersen, A. C. (1988). Adolescent Development. *Annual Review of Psychology*, *39*(1), 583–607. https://doi.org/10.1146/annurev.ps.39.020188.003055

Petrill, S. A., Rempell, J., Oliver, B., & Plomin, R. (2002). Testing cognitive abilities by telephone in a sample of 6- to 8-year-olds. *Intelligence*, *30*(4), 353–360. https://doi.org/10.1016/S0160-2896(02)00087-9

Queiroz, P., Garcia, O. F., Garcia, F., Zacares, J. J., & Camino, C. (2020). Self and Nature: Parental Socialization, Self-Esteem, and Environmental Values in Spanish Adolescents. *International Journal of Environmental Research and Public Health*, *17*(10), 3732. https://doi.org/10.3390/ijerph17103732

Rahman, M. S. (2016). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review. *Journal of Education and Learning*, *6*(1), 102. https://doi.org/10.5539/jel.v6n1p102

Raven, J. C., & Court, J. H. . (1998). *Raven's progressive matrices and vocabulary scales.* (Vol. 759). Oxford: Oxford pyschologists Press.

Reardon, S., F., Valentino, R., A., Kalogrides, D., Shores, K., A., & Greenbreg, E., H. (2013). *Patterns and Trends in Racial Academic Achievement Gaps Among States, 1999-2011*. Stanford University.

Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging*, *17*(3), 423–434.

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, *21*(2), 95–103. https://doi.org/10.1037/h0045357

Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014). Academic and emotional functioning in middle school: The role of implicit theories. *Emotion*, *14*(2), 227–234. https://doi.org/10.1037/a0035490

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, *80*(1), 1–28.

Rus, A. V., Lee, W. C., Salas, D. B. B., Parris, S. R., Webster, R. D., Lobo, A. R., Ecaterina, S., & Popa, C. (2020). *Bronfenbrenner's Ecological System Theory and the Experience of Institutionalization of Romanian Children*. 16.

Ryle, G. (2009). *The concept of mind*. Routledge.

Salmela-Aro, K., & Tang, X. (n.d.). *University of Helsinki Faculty of Educational Sciences Master's degree*.

Sanders, R. A. (n.d.). *Adolescent Psychosocial, Social, and Cognitive Development*. 6.

Sandoval-Hernandez, A., & Cortes, D. (2012). *Factors and conditions that promote academic resilience: A cross-country perspective (Wab number1793097)*. 25.

Sands, R., & D'Amato, R. C. (2018). McCarthy Scales of Children's Abilities. In J. Kreutzer, J. DeLuca, & B. Caplan (Eds.), *Encyclopedia of Clinical Neuropsychology* (pp. 1–2). Springer International Publishing. https://doi.org/10.1007/978-3-319-56782-2_1462-3

Sapienza, J. K., & Masten, A. S. (2011). Understanding and promoting resilience in children and youth. *Current Opinion in Psychiatry*, *24*(4), 267–273. https://doi.org/10.1097/YCO.0b013e32834776a8

Schunk, D. H. (2005). Self-Regulated Learning: The Educational Legacy of Paul R. Pintrich. *Educational Psychologist*, *40*(2), 85–94. https://doi.org/10.1207/s15326985ep4002_3

Shen, C., & Pedulla, J. J. (2000). The Relationship between Students' Achievement and their Self-perception of Competence and Rigour of Mathematics and Science: A cross-national analysis. *Assessment in Education: Principles, Policy & Practice*, *7*(2), 237–253. https://doi.org/10.1080/713613335

Silverman, D. (2010). Qualitative research. *London: Sage.*, 77–82.

Spaull, N. (2013). Poverty & privilege: Primary school inequality in South Africa. *International Journal of Educational Development*, *33*(5), 436–447. https://doi.org/10.1016/j.ijedudev.2012.09.009

Steinberg., L. (2014). Age of opportunity: Lessons from the new science of adolescence,. *Houghton Mifflin Harcourt*.

stephen, T., & Derek, Y. (2009). *The importance of socio-economic status in determining educational achievement in South Africa*. Stellenbosch university.

Suresh, Dr. E., & Kumaravelu, M. A. (2017). *The Quality of Education and its Challenges in Developing Countries*.

Te'Neil Lloyd, B. (2002). A Conceptual Framework for Examining Adolescent Identity, Media Influence, and Social Development. *Review of General Psychology*, *6*(1), 73–91. https://doi.org/10.1037/1089-2680.6.1.73

Thomson, S.B. (2011). *Qualitative research: Validity*. *1*(6), 77–82.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, *48*(4), 388–396. https://doi.org/10.1111/j.1365-2648.2004.03207.x

Tucker, M. (1990). *Out There: Marginalization and Comtemporary Cultures* (R. Ferguson, M. Gever, T. T. Minh-ha, & C. West, Eds.; pp. 341–343). The MIT Press.

Ugur, H. (2015a). The Self Concept Change as a Tool for Developmental Academic Advising. *Universal Journal of Educational Research*, *3*(10), 697–702. https://doi.org/10.13189/ujer.2015.031006

Ugur, H. (2015b). The Self Concept Change as a Tool for Developmental Academic Advising. *Universal Journal of Educational Research*, *3*(10), 697–702. https://doi.org/10.13189/ujer.2015.031006

van der Berg, S. (2007). Apartheid's Enduring Legacy: Inequalities in Education. *Journal of African Economies*, *16*(5), 849–880. https://doi.org/10.1093/jae/ejm017

van der Berg, Servaas., & Hofmeyr, H. (2018). *An incomplete transition: Overcoming the legacy of exclusion in South Africa.*

von Stumm, S. (2017). Socioeconomic status amplifies the achievement gap throughout compulsory education independent of intelligence. *Intelligence*, *60*, 57–62. https://doi.org/10.1016/j.intell.2016.11.006

Wang, C. Wen., & Neihart, M. (2015). Academic self-concept and Academic self-efficacy: Self-belief enables academic achievement of twin-exceptional students. *Routledge Taylor & Francis Group*, *37*(2), 63–73. https://doi.org/10.1080/02783193.2015.1008860

Wehrle, K., & Fasbender, U. (2019). Self-Concept. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1–5). Springer International Publishing. https://doi.org/10.1007/978-3-319-28099-8_2001-1

Wigfield, A., & Eccles, J. S. (2000a). Expectancy–Value Theory of Achievement Motivation. *Contemporary Educational Psychology*, *25*(1), 68–81. https://doi.org/10.1006/ceps.1999.1015

Wigfield, A., & Eccles, J. S. (2000b). Expectancy–Value Theory of Achievement Motivation. *Contemporary Educational Psychology*, *25*(1), 68–81. https://doi.org/10.1006/ceps.1999.1015

Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to amount and breadth of their reading. *Journal of Educational Psychology*, *89*, 420–432.

Wills, G., & Hofmeyr, H. (2019). Academic resilience in challenging contexts: Evidence from township and rural primary schools in South Africa. *International Journal of Educational Research*, *98*, 192–205. https://doi.org/10.1016/j.ijer.2019.08.001

Wills, I. R. (2011). *The history of Bantu Education: 1948—1994.*

Yusuf, B., & Balarabe, M. (2013). *Relationship between academic self-concept and academic performance of junior high school students in Ghana. 9*(34), 93–103.

APPENDICES

Appendix A

Demographic Questionnaire

1. Age: _____

2. Sex:_____

3. What terms (e.g. labels, groups, associations/affiliations, heritage) would you use to describe your cultural background?

4. If you had to classify yourself in a particular population group, what would you describe yourself as:

- Black
- White
- Coloured
- Indian
- Other (please specify):

4. What is your home language? (please choose one)

☐ Afrikaans

☐ English

☐ IsiNdebele

☐ IsiXhosa

☐ IsiZulu

☐ Sepedi (North Sotho)

☐ Sesotho

☐ Setswana

☐ SiSwati

☐ Tshivenda

☐ Xitsonga

☐ Other (please specify):_____

5. Faculty registered in:

6. Degree registered for:

7. High School attended:

8. Did either of your parents, graduate high school?

Yes, both

Yes, mother

Yes, father

9. Have either of your parents attended University or any other higher education institution?

Yes, both

Yes, mother

Yes, father

10. Has anyone else in your family attended University or any other higher education institution? If yes, please elaborate.

11. What is your religious affiliation?

☐ No religion

☐ Christianity

☐ Hinduism

☐ Islam

☐ Judaism

☐ Baha'i

☐ Buddhist

☐ Zoroastrian

☐ Sikhism

☐ Taoism/ Confucius

☐ Traditional African Religion

☐ Other religion or religious dominations (please specify): _____

12. Please rate your level of religiosity with 1 being "not so religious" and 5 being "very religious.

13. Are you married?

☐ Yes ☐ No

14. Are you in a relationship?

☐ Yes ☐ No

Appendix B

Retrospective Qualitative questions

PISA grouping	**Current**	**Retrospective**
Academic	1. How do you perceive your academic abilities?	How did you perceive your academic abilities in high school?
	2. What would you say your reading ability is like? OR How would you describe your reading ability?	What did you think of your reading ability in high school?
Self-efficacy	3. How would you say you manage in difficult situations?	How would you say you managed at high school when faced with difficult situations?
	4. How do you feel about the things you have accomplished?	How do you feel about the things you have accomplished during your (high) school education?
	5. -	How would you say you handled multitasking when you were in high school (explain this is taking many things on the same time)?
	6. -	While you were in high school, how would you say your belief in yourself helped you get through hard times?
	7. -	While you were in high school, when you were faced with a difficult

		situation, how would you navigate yourself out of that difficulty?
Growth mindset	8. What do you think about your intelligence being something you can change?	While you were in high school, what did you think about your intelligence being something you can change?
Fear of failure	9. -	While you were in high school, when you are failing at something what did you usually think about or attribute the failure to?
Sense of belonging at school	10. -	Did you ever feel like an outsider or left out during high school? Tell me more about that please.
	11. -	How was it making friends for you at high school?
	12. -	Did you feel like you belonged at high school? Can you please tell me more about those feelings and what you remember?
	13. -	Did you feel awkward or out of place during high school? Can you please tell me more about those feelings?
	14. -	How likable do you think you were to other students during high school?
	15. -	Did you ever feel lonely at high school? Can you please tell me more about you felt?

Appendix C

Consent form

Title of project: The exploration of self-perception in the educational attainment of high achieving students from a low socioeconomic background in South African.

Name of Research: Phemelo Sebele.

I, _____, agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/focus group/other activity may be audio		

recorded	YES	NO
I agree that direct quotation from my interview/focus group/other activity may be used by the researcher in their research report/manuscript/book chapter	YES	NO
I agree that my participation will remain anonymous (my name will not be used by the research in their research report/manuscript/book chapter)	YES	NO
I agree that other researchers may use the information I provide in my interview/focus group/other activity (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on	YES	NO

_____ (Signature)

_____ (name of participant)

_____ (Date).

Appendix D

Participant information sheet

Good day,

My name is Phemelo Sebele. I am a Masters student in the Social and Psychological programme at the University of the Witwatersrand, Johannesburg. My supervisor is Dr Sahba Besharati. I am conducting a research study about self-perception and educational attainment. The study title is: A qualitative study exploring self-perception in educational attainment of high achiever students from a low socioeconomic background in South African context.

I am inviting you to take part in an interview that will either be conducted online or in-person, all COVID-19 safety protocol (both the researcher and the participant will be wearing masks, sanitized, and will be seated 1.5 meters apart) will be implemented. If you decide to take part, your participation in this research will last for approximately an hour. The interview will take place online via WhatsApp, Zoom or MS Teams after school. There are no direct benefits associated with participation, however, given that the interviews will be conducted online or in-person, each participant will receive R150 for either travel or data.

With your permission, I would like to audio record the interview using the digital platforms mentioned above. This data will stored in a password secured computer and deleted after two years. Both myself, the researcher (Phemelo) and my supervisor (Dr Sahba) will have access to the data.

The online interview will be confidential, however, anonymity cannot be guaranteed during the data collection. The participants will be identifiable either through face to face interviews or through the online platforms. Anonymity will be guaranteed during the results phase and in the research process, through using pseudonyms and changing any identifiable information but not during data collection. With your permission, other researchers may use the data collected from this research study, but your name and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything.

The research study will be written up as a research report published by The University of the Witwatersrand and possibly other published articles. The Masters report will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Phemelo Sebele.

SebeleP.B

Researcher:

Phemelo Sebele, 2620863@students.wits.ac.za.

Supervisor:

Dr Sahba Besharati, sahba.besharati@wits.ac.za, 011 717 4529.

Appendix E

Ethics training certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
PSYCHOLOGY

This is to certify that

Phemelo Sebele
Student number: 2620863

Participated in Research and Ethics Training as part of the Masters research module PSYC7022A for the Masters in Social and Psychological Research

Held between the 21st and the 25th of February 2022 at the Department of Psychology, University of the Witwatersrand

Areas of training included:

- Writing a Research Proposal
- Writing a Literature Review
- Data Collection and Instrument Design
- Qualitative Methods of Data Collection
- Quantitative Methods of Data Collection
- Research Ethics
- Plagiarism
- Library and Zotero Training
- Research Presentation

Departmental Research Ethics Chair
Prof Zaytoon Amod

Head of the Psychology Department
Prof Carol Long

Umthombo Building – 2nd Floor, Room U211, Braamfontein East Campus, Private Bag 3, WITS 2050
T +27 11 717 4503/53 | E psych.SHCD@wits.ac.za | www.wits.ac.za/shcd/psychology/

Appendix F: Permission letter



University of the Witwatersrand,

University of the Witwatersrand, 011 717 1888.

Wits registrar

Thato Chauke (Office administrator).

University of the Witwatersrand

1 Jan Smuts Ave,

Braamfontein, Johannesburg,

200.

03/05/2022.

Dear Sir/Madam,

Re: Permission to conduct research at [insert organisation name].

My name is Phemelo Berveley Sebele

I am studying for a Masters degree in Social and Psychological Research in the school of Human and Community Development at the University of the Witwatersrand. I am seeking permission to do research at the University of the Witwatersrand.

I am conducting research on self-perception and educational attainment. Research title: A qualitative study exploring self-perception in educational attainment of high achiever students from a low socioeconomic background in South African context. I chose this topic because there isn't many studies to the best of my knowledge that have explored the experiences and how self-perception of high-achieving students from a low socioeconomic background influence educational attainment in the low – middle income countries like South Africa. My research will focus on first-year university student.

The research will entail collecting data from first-year students between the ages of 18-20 years across faculties and those who are being funded by NSFAS

Participants will be asked to give their written or verbal consent before the research begins. Their responses will be treated confidentially, and identities (their names and the name of the organisation) will be anonymous unless otherwise expressly indicated. Individual privacy will be maintained in all published and written data resulting from the study.

The results will be communicated in a Masters thesis and will be published at the University of the Witwatersrand library.

The research participants will not be advantaged or disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for this study.

All research data will be preserved anonymously for reuse by other research and it will be kept in a password secured computer. The research and her supervisor will both have access to the data.

I therefore request permission in writing to conduct my research at your organisation. The permission letter should be on your organisation's headed paper, signed and dated, and specifically referring to myself by name and the title of my study.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,

Phemelo Sebele.

Phemelo

072 744 6864.

2620863@students.wits.ac.za.

Dr Sahba Besharati

011 717 4529

Sahba.besharati@wits.ac.za

Appendix G: Ethics certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE:	**PROTOCOL NUMBER: MASPR/22/11**
PROJECT TITLE:	A qualitative study exploring self-perception in educational attainment of high achiever students from a low socioeconomic background in South African context.
INVESTIGATOR	Sebele Phemelo (2620863)
SCHOOL/DEPARTMENT OF INVESTIGATOR	SHCD/Psychology
DATE CONSIDERED	30 May 2022
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	Low Risk
EXPIRY DATE	31 December 2024

ISSUE DATE OF CERTIFICATE 11 July 2022 **CHAIRPERSON** _____ (Dr Sahba Besharati)

cc: Dr Sahba Besharati (Supervisor)

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

Sebele P.B _____ **13 / 07 / 2022.**

Signature **Date**

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES