

**Gender as moderator in the relationship between identity
formation and bully behaviour among adolescents**

by

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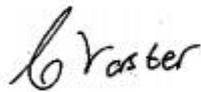
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Table of Contents

Declaration.....	ii
Supervisor’s Permission to Submit.....	iii
Proof of Language Editing.....	iv
Proof of APA Editing.....	v
Acknowledgements.....	vi
Table of Contents.....	vii
List of Tables.....	x
List of Appendices.....	xi
Abstract.....	xii
Opsomming.....	xiv
Chapter 1 – Introduction.....	1
1.1 Theoretical Grounding, Research Rationale and Aim.....	1
1.2 Methodology Overview.....	5
1.3 Delineation of Chapters.....	7
1.4 Chapter Summary.....	8
Chapter 2 – Identity Formation and Bully Behaviour.....	9
2.1 Adolescence.....	9
2.1.1 Defining adolescence.....	9
2.1.2 Developmental tasks during adolescence.....	11
2.2 Identity Formation.....	16

2.2.1 Defining identity formation.	16
2.2.2 Theories on identity formation.	17
2.2.3 Factors related to identity formation.	19
2.2.4 Gender differences in adolescent identity formation.....	21
2.3 Bully Behaviour	23
2.3.1 Defining the different forms of bully behaviour.	23
2.3.2 Gender differences in adolescent bully behaviour.	26
2.4 Identity Formation, Bully Behaviour and Gender as a Possible Moderator	28
2.5 Chapter Summary.....	32
Chapter 3 - Methodology.....	33
3.1 Research Aim and Questions	33
3.2 Research Approach and Design	34
3.3 Participants and Sampling Procedures	35
3.4 Data Collection Procedures	36
3.4.1 Biographic questionnaire.....	37
3.4.2 Ego Identity Process Questionnaire (EIPQ).	37
3.4.3 Forms of Bullying Scale (FBS).	38
3.5 Data Analysis	41
3.6 Ethical Considerations.....	42
3.7 Chapter Summary.....	43

Chapter 4 – Results and Discussion	45
4.1 Results	45
4.1.1 Descriptive statistics.....	45
4.1.2 Inferential statistics.....	47
4.2 Discussion of the Results	51
4.2.1 Descriptive statistic tendencies.....	51
4.2.2 The relationship between identity formation and bully behaviour.....	54
4.2.3 The moderating role of gender.	58
4.3 Chapter Summary.....	59
Chapter 5 – Limitations, Recommendations and Conclusion	60
5.1 Key Findings	60
5.2 Limitations of the Study	60
5.3 Recommendations for Future Studies	62
5.4 Conclusion.....	63
Reference List	66
Appendix A – Questionnaires	85
Appendix B – Ethical Clearance.....	90
Appendix C – Authorisation from Department of Education.....	91
Appendix D – Consent Letter to Principal.....	92
Appendix E – Informed Consent	93
Appendix F – Turn it in Report.....	94

List of Tables

Table 1: <i>Distribution of the Sample with regard to Gender, Age and Language</i>	36
Table 2: <i>The final version of the Forms of Bullying Scale (FBS) used in this study</i>	40
Table 3: <i>Minimum, Maximum, Mean, and Standard Deviation Scores for Identity Formation and Bully Behaviour (Males and Females)</i>	46
Table 4: <i>Correlations between Identity Formation and the Various Forms of Bully Behaviour</i>	48
Table 5: <i>Correlations between the Various Forms of Bully Behaviour</i>	49
Table 6: <i>Model Summary for Gender as Moderator</i>	50

List of Appendices

Appendix A – Questionnaires	85
Appendix B – Ethical Clearance	90
Appendix C – Authorisation from Department of Education	91
Appendix D – Consent letter to Principal	92
Appendix E – Informed consent	93
Appendix F – Turn it in Report.....	94

Abstract

During adolescence, individuals face several social challenges while forming their identities. These social pressures may contribute to increases in risky behaviour such as bully perpetration and bully victimisation. Bully behaviour occurs on all social levels in South Africa and therefore adolescents are confronted with this behaviour from a young age. Males and females form identities in different ways and are confronted with bully behaviour differently. Therefore, the aim of the study was to investigate whether a significant amount of the variance in bully behaviour can be explained by identity formation.

The present research study was conducted using a quantitative, non-experimental approach, with a correlational research design. A sample of 168 participants was selected from a high school in the Mangaung area, Bloemfontein, by means of non-probability, convenience sampling. Self-report questionnaires, including a biographic questionnaire, the *Ego Identity Process Questionnaire (EIPQ)* and the *Forms of Bullying Scale (FBS)* with versions to measure bully victimisation (*FBS-V*) and perpetration (*FBS-P*), were used to collect data for the research. Physical bullying and psychological bullying were measured and data were analysed by means of regression analyses.

In this study, it was found that 2.56% of variance in bully victimisation can be explained by identity formation and 2.62% of variance in psychological bully victimisation can be explained by identity formation. Various significant intercorrelations between the different forms of bully behaviour were observed. It was also concluded that, in the present study, gender did not play a significant moderating role in the relationship between bully behaviour and identity formation. This study contributed to the literature in terms of adolescence, identity formation, bully behaviour and gender. In practical settings, the study contributed to the field of

psychology, especially in the contexts of secondary schools where workshops regarding identity formation and bully behaviour can be presented.

Keywords: adolescents, adolescence, identity formation, identity status, bully behaviour, bully victimisation, bully perpetration, psychological bullying, physical bullying, gender

Opsomming

Individue vorm 'n duidelike identiteit gedurende adolessensie. Identiteitsvorming gaan gepaard met vele sosiale uitdagings wat mag lei tot 'n toename in risiko gedrag in die vorm van boelie. Boeliegedrag kom voor in alle sosiale kringe in Suid-Afrika en daarom word adolessente reeds op 'n jong ouderdom met sulke gedrag gekonfronteer. Mans en vroue vorm hul identiteit op verskillende maniere en word daarom op verskillende wyses met boeliegedrag gekonfronteer. Die doel van die studie was dus om te ondersoek of 'n beduidende hoeveelheid variansie in boeliegedrag verduidelik kan word deur identiteitsvorming.

Die huidige navorsingstudie is uitgevoer deur van 'n kwantitatiewe, nie-eksperimentele benadering met 'n korrelasionele navorsingsontwerp gebruik te maak. 'n Steekproef van 168 deelnemers is gekies vanuit 'n hoërskool in die Mangaung area, Bloemfontein, deur middel van 'n nie-waarskynlikheid-, gerieflikheidsteekproef. Self evalueringsvraelyste, insluitend 'n biografiese vraelys, die *Ego Identity Process Questionnaire (EIPQ)* en die *Forms of Bullying Scale (FBS)* met weergawes om boeliegedrag te meet vanuit die perspektief van die slagoffer (*FBS-V*) en die oortreder (*FBS-P*), is gebruik om data vir die data in te samel. Fisiese boeliegedrag en sielkundige boeliegedrag is gemeet en data-ontleding is gedoen deur middel van regressie-analises.

Die resultate het aangedui dat 2.56% van die variansie in boeliegedrag vanuit die perspektief van die slagoffer verduidelik kan word deur identiteitsvorming, terwyl 2.62% van die variansie in sielkundige boeliegedrag vanuit die perspektief van die slagoffer deur identiteitsvorming verduidelik kan word. Daar is verhoudings gevind tussen fisiese boeliegedrag en sielkundige boeliegedrag, asook tussen boeliegedrag vanuit die perspektief van die slagoffer en boeliegedrag vanuit die perspektief van die oortreder. Dit is ook verklaar dat geslag in hierdie

studie nie 'n modererende rol speel tussen boeliegedrag en identiteitsvorming nie. Die studie dra by tot literatuur in terme van adolessensie, identiteitsvorming, boeliegedrag en geslag. Die studie dra ook prakties by tot die sielkundeveld, veral in die konteks van hoërskole waar werkwinkels oor identiteitsvorming en boeliegedrag aangebied kan word.

Sleutelwoorde: adolessente, adolessensie, identiteitsvorming, identiteitsstatus, boeliegedrag, boelie slagoffer, boelie oortreder, sielkundige boeliegedrag, fisiese boeliegedrag, geslag

Chapter 1 – Introduction

Identity formation is a key developmental task during adolescence and serves as a foundation for important life decisions such as a career choices, romantic partners and friends. Identity is formed after a process of exploration and commitment where after it guides the behaviour of individuals. During adolescence, individuals face several challenges, including bully behaviour from their peer group. Some individuals are the victims of this behaviour, while others are the perpetrators themselves. A significant amount of variance in bully behaviour might be explained by identity formation. Theorists suggest that males and females experience identity formation differently and therefore, this research study investigated the relationship between identity formation and bully behaviour, as well as whether gender moderates the relationship between the two constructs.

A general review of the study is given in Chapter 1. Included in this chapter are the rationale, a theoretical grounding and the aim of the research. A brief discussion of the methodology and a chapter outline are also provided.

1.1 Theoretical grounding, Research Rationale and Aim

Adolescence is defined as a transitional period in both psychological and physical growth between childhood and adulthood, while the privileges and responsibilities of adulthood are acquired (Coovadia, Jugnunda, & Ramkissoon, 2016). In this study, adolescence was conceptualised from a developmental perspective considering three developmental domains, namely physical, cognitive and psychosocial development. Several physical changes take place during adolescence, including changes in the brain structure and puberty (Sigelman & Rider, 2018). Hormonal changes are also taking place which may cause high prevalent rates of aggression, especially amongst males (Fragkaki, Cima, & Granic, 2018). Considering the

cognitive domain, individuals start to make use of formal operational thought during this life stage (Piaget, 1972) which prepares adolescents to gain a sense of identity and to think extensively about their morals (Sigelman & Rider, 2018). The importance of the peer group during adolescents is also considered when focusing on the psychosocial domain. Peers can play a positive or negative role during adolescence and individuals can either receive support from peers, or get rejected by them (Plaisier & Konijn, 2013). Relationships are important for psychosocial development during adolescence and parents and peers can be considered as contributors in adolescents' identity formation (Schachter & Ventura, 2008).

A clear, consistent sense of identity is formed during adolescence (Erikson, 1968). In this study, Erikson's (1968) psychosocial theory and Marcia's (1966) identity status paradigm were considered. Identity formation consists of the experience of an identity crisis, exploration of several possibilities and finally, commitment to certain roles, goals and values. According to Thornberg (2015), identity is constructed and reconstructed through social interactions. Individuals have to evaluate their own actions, find out what makes their world meaningful and build connections with other people. Klimstra, Hale, Raaijmakers, Branje and Meeus (2010) propose that females are more mature in terms of identity formation and have a more stable identity profile in early adolescence than males, but only until late adolescence. During late adolescence, males catch up with females in terms of maturity and identity profiles (Klimstra et al., 2010). However, Hatano and Sugimura (2017) found no gender differences with regard to identity formation.

A fair amount of research about bully behaviour has been done so far (Allen, 2013), however, according to De Wet (2012), bullying is a still growing concern internationally, as well as in South Africa. Cho and Chung (2012) argue that 85% of learners in a given classroom

are affected by peer bullying, either as perpetrators themselves, or as victims. Additionally, bystanders, defenders and teachers are also affected by bullying. Adolescents are particularly affected by bully behaviour considering that interpersonal relations and social hierarchies influence how their identities are formed during this life stage (Lehman, 2014).

Research on bully behaviour in South Africa has increased recently. However, it is still limited in comparison to international literature on bullying (Carter, 2017). Previous South African research among adolescents revealed that 3.9-49% of adolescents indicated that they were perpetrators, 13-60.2% were victims and 5.5-34% were perpetrator-victims of bully behaviour (Burton & Leoschut, 2013; Mlisa, Ward, Flisher, & Lombard, 2008). These findings correlate with international research where the majority of learners indicated that they were victims of bully behaviour as opposed to the other two groups. A study by the University of South Africa (UNISA) in 2012 stated that 1 158 learners out of a sample of 3 371 learners (34,4%) had been victims of bully behaviour (Youth Research Unit, 2012). Psychological bullying was more prevalent (58.1%) as opposed to 38,4% of learners who were victims of physical bullying and 16,9% of learners who were victims of cyber bullying (Youth Research Unit, 2012). Considering the above-mentioned statistics, it is evident that bully behaviour is a growing concern in South Africa.

The definition put forth by Olweus (2013) with regard to bullying was considered for this study, where bullying is defined as undesirable activities (physical or verbal), having a constant, confrontational intent and a power difference amongst perpetrators and victims. Different types of bullying are described, e.g. physical bullying such as stealing, punching, hitting, taunting and teasing (Shamos, 2009). Psychological or relational bullying is more subtle and malicious and includes behaviours such as spreading rumours about one another,

the deliberate exclusion from a group, verbal threats and gossip (Shamos, 2009). Individuals who engage in bullying others are called perpetrators (Mohebbi, Mirnasab, & Wiener, 2016), while the person who is on the receiving end of the bully behaviour is called the victim or the target (Perlus, Brooks-Russell, Wang, & Iannotti, 2014). Those who engage in bully behaviour as perpetrators and are at the receiving end of bullying as well, are seen as perpetrator-victims (Cassidy, 2009). There are contrasting findings about whether gender differences are present in bully behaviour. According to Lehman (2014), males are prone to engage in physical attacks, while females tend to be involved in psychological bullying such as gossip and emotional attacks. However, Kljakovic, Hunt and Jose (2015) propose that bullying is less common among females than males. Furthermore, females tend to experience more internal symptoms such as shyness, insecurity and anxiety when they are involved in bully behaviour, while males experience more external symptoms, such as aggressiveness and impulsivity (Rodriguez & Loos-Sant´Ana, 2015).

Some researchers have considered associations between bullying and identity development. Rodriguez and Loos-Sant´Ana (2015) argued that both males and females who are victims of violence and bully behaviour experience feelings of poor identity formation, low self-esteem and poor self-concept. It can thus be hypothesised that adolescents who have not reached identity formation, are more prone to bully behaviour. Thornberg (2015) also stated that individuals who express ambivalence regarding their identity are often victims of bully behaviour.

Limited research regarding identity formation and bully behaviour is available at this stage (Van Hoof, Raaijmakers, Van Beek, Hale & Aleva, 2008). Previous studies focused on the perpetrator or the victim of bully behaviour respectively, with little investigation considering

both aspects of this behaviour (Sharkey et al., 2015). Other studies focused on aspects of identity such as gender identity and bullying, ethnic identity and bullying and social identity and bullying, without considering identity in general. Duffy and Nesdale (2008) also suggested that future research should explore whether an identity perspective can aid in identifying victims of bully behaviour.

Thus, the aim of this study was to investigate the relationship between identity formation and bully behaviour from the perspective of the victim and the perpetrator, as well as whether gender plays a moderating role in the relationship between identity formation and bully behaviour. The following research questions were investigated:

1. Can a significant amount of the variance in bully behaviour be explained by identity formation?
2. Does gender moderate the relationship between identity formation and bully behaviour?

1.2 Methodology Overview

The study was conducted using a quantitative approach. A non-experimental type with a descriptive and correlational design was utilised (Stangor, 2015). Quantitative research methods focus on numbers or measurable, systematic information to investigate possible relationships (Leedy, 1993). A non-experimental research type is used to study variables as they are instead of manipulating them (Belli, 2009) and a descriptive and correlational design is used to examine and document the differences between two or more variables (Howell, 2014).

Non-probability convenience sampling was utilised for the recruitment of 168 adolescents in Mangaung, in the Free State, South Africa. The study included males and females between

the ages of 14 and 19 years. Convenience sampling is a non-probability sampling method where participants are selected in terms of their availability (Springer, 2010).

A self-report battery was compiled to collect the research data (Appendix A). A biographical section, consisting of questions related to age, gender (biological gender, including male and female), ethnic group and two questionnaires to measure identity formation and bully behaviour respectively, were included. To measure identity formation among adolescents, Balistreri, Busch-Rossnagel and Gisinger's (1995) *Ego Identity Process Questionnaire (EIPQ)* was utilised. This questionnaire is based on Marcia's (1966) dimensions of exploration and commitment. In order to measure bully behaviour, Shaw, Dooley, Cross, Zubrick and Waters's (2013) *Forms of Bullying Scale (FBS)* with versions to measure bullying victimisation (*FBS-V*) and perpetration (*FBS-P*) was used. In addition to this, the *Physical and Psychological Bullying Measures (PPBM)* (Yahner, Dank, Zweig, & Lachman, 2015) was utilised to include both physical and psychological forms of bullying.

The internal reliability of the items of the various measurements utilised in this study was determined using Cronbach's alpha coefficients (Howell, 2014). Firstly, a Pearson product moment correlation (Howell, 2014) was conducted to investigate the relationship between identity formation and bully behaviour. Secondly, moderated regression analyses were used to determine the possible role of gender as moderator in the relationship between the different forms of bully behaviour and identity formation.

Ethical principles were considered throughout the research study. Permission to conduct the research study was obtained from the Research Ethics Committee of the Faculty of the Humanities of the University of the Free State (Appendix B) and the Free State Department of

Education (Appendix C). Consent that the study could be conducted was obtained from the principal of the school where the data was collected (Appendix D). Ethical considerations such as informed consent (Appendix E), confidentiality, the justice principle, beneficence and non-maleficence were taken into account in this research study.

1.3 Delineation of Chapters

Chapter 1: An overview of the study is given in the first chapter. Literature regarding identity formation and bully behaviour during adolescence is discussed and a brief overview with regard to the methodology and ethical considerations of the study is included. Chapter 1 concluded with a delineation of the chapters of the study.

Chapter 2: Existing literature in terms of identity formation and bully behaviour in the context of adolescence is provided. Firstly, adolescence is defined and discussed in three developmental domains. Secondly, definitions of identity formation, identity theories and factors related to identity formation are discussed and thirdly, bully behaviour is defined and discussed. The chapter concludes with a section about the relationship between the two constructs, including gender as a possible moderator between identity formation and bully behaviour.

Chapter 3: Employed methodology in the research study is described and provided. Chapter 3 gives specific attention to the research design, sampling, data collection, data analysis and ethical considerations for the study.

Chapter 4: In Chapter 4, results regarding the research questions are presented using descriptive and inferential statistics. A detailed discussion based on existing literature in the field concludes the chapter.

Chapter 5: The research study is concluded in Chapter 5 and key findings are discussed. Limitations of the present study, as well as recommendations for future research studies are presented.

1.4 Chapter Summary

The theoretical grounding of the study, the research rational and aims were discussed in this chapter. Key concepts regarding identity formation and bully behaviour during adolescence were also highlighted. Lastly, an outline of the methodology employed was provided and the chapter concluded with a delineation of the research chapters.

Chapter 2 – Identity Formation and Bully Behaviour

An overview of adolescence is given and the importance of this life stage in relation with the constructs of identity formation and bully behaviour is emphasised. The chapter starts with a definition of adolescence, followed by different developmental tasks of adolescence. Thereafter, the constructs identity formation and bully behaviour are defined and discussed, as well as gender differences with regard to these two constructs. This chapter concludes with a discussion about the relationship between identity formation and bully behaviour and the moderating role of gender in this relationship.

2.1 Adolescence

In the following paragraphs, the life stage adolescence is discussed in detail. A general overview with regard to adolescence is given, followed by challenges that adolescents are facing. Important developmental tasks of adolescents are included in this section.

2.1.1 Defining adolescence.

Adolescence is perceived as a life-stage of enormous transformation for young people. Bayer, Gilman, Tsui and Hindin (2010) define adolescence as a transitional period between childhood and adulthood, but the degree and amount of transitions vary from person to person. Adolescence is defined by Coovadia et al. (2016) as a transitional period in both psychological and physical growth between childhood and adulthood, as well as the beginning of acquiring privileges and responsibilities of adulthood. Biological processes such as puberty drive this transition into physical and sexual maturation (Coovadia et al., 2016). According to Mandarino (2014), adolescence is a stage where individuals are separating and individuating from their families to form their own identity.

Szwedo, Hessel, Loeb, Hafen and Allen (2017) define adolescence as a time to create a sense of balance between dependence and independence within social relationships. Adolescents experience frustration during this life stage because they become insecure within their social setups and self-aware about who they are (Rith-Najarian, McLaughlin, Sheridan, & Nock, 2014). It is a time where they find themselves rejecting their parents' or caregivers' values, while feeling confused and anxious about where in society they fit in and therefore may engage in risk behaviour such as bullying. Furthermore, adolescents often feel isolated and misunderstood in their search for independence. Okonkwo (2013) stated that adolescents develop lifelong perceptions, beliefs and practices, but struggle with developmental tasks such as accepting physical changes, separating from their family and identity formation. Identity formation is an essential task during adolescence where the goal is to form a sense of self that fits with individuals' past, present and future possibilities (Erikson, 1968).

Although adolescence is described as a frustrating period, it is also seen as a time of growth where intense exploration and commitment take place and vocational goals, interests and values are formed as part of identity formation (Migunde, Othuon, & Mbagaya, 2015). An emerging sense of self-knowledge is developed when internal qualities such as interests, abilities and aptitudes are identified (Van Doeselaar, Klimstra, Denissen, Branje, & Meeus, 2018). Adolescents' self-esteem during this life-stage depends on whether they are aware of their strengths, talents, purpose and personality, while they see themselves as competent and unique. Furthermore, external tasks such as short-term and long-term goal-setting and considering possible career options also contribute to identity formation when a sense of self apart from others are formed (Van Doeselaar et al., 2018).

2.1.2 Developmental tasks during adolescence.

In the next section, different developmental tasks, specifically related to adolescence, are discussed in three developmental domains. Physical development, cognitive development and psychosocial development are considered. However, it should be noted that these domains continuously influence one another and do not exist in isolation (Newman & Newman, 2017).

2.1.2.1 Physical development.

During adolescence, individuals are strongly focused on their body image and physical self. Rapid physical maturation takes place during this life stage such as the growth spurt, which is activated by an increase in the level of growth hormones circulating through the body. Males and females develop at different rates and like infants, grow in spurts rather than continuously (Sigelman & Rider, 2018). The process of biological change that results in sexual maturation and the ability to produce children also take place during this life stage and is better known as puberty (Vijayakumar, Op de Macks, Shirtcliff, & Pfeifer, 2018). The rate of physical and sexual maturation is not only different for males and females, but also for each individual (Louw & Louw, 2014). Genes, the environment, stress and hormones play a substantial role in the timing of physical and sexual maturation. Puberty may be accompanied by psychological implications for adolescents, especially with regard to the rate of development (Louw & Louw, 2014). Archer (2009) reasoned that the competitive risk-taking during puberty is a risk-factor for bully perpetration amongst males.

During adolescence, noteworthy hormonal and maturational changes take place, as well as an increase in the prevalence of aggression (Fragkaki et al., 2018). Hormonal changes in the Hypothalamic-Pituitary-Adrenal (HPA) axis and the Hypothalamic-Pituitary-Gonadal (HPG) occur, where after activity in the HPG leads to secretion of steroid hormones such as

testosterone in males and estradiol in females. Testosterone is associated with aggression, competitiveness and dominance in males (Fragkaki et al., 2018). In their study, Duke, Balzer and Steinbeck (2014) found that there might be a possible relationship between testosterone levels and adolescent behaviour. Considering the above findings, it is evident that increased aggression takes place during adolescence.

Abrupt changes in brain structures and function also occur during adolescence. Grey matter decrease until approximately 25 years of age while white matter increase problem-solving and thinking abilities of adolescents (Arain et al., 2013). The above-mentioned changes in the brain largely lead to improvements in decision making, sensory functioning and coordination (Craig & Dunn, 2010).

2.1.2.2 Cognitive development.

As discussed earlier, physical changes in the brain occur (Arain et al., 2013; Craig & Dunn, 2010) during adolescence and influence the cognitive development of individuals in this life stage. Piaget (1972) reasoned that the formal operational stage of cognitive development can be noticed in the beginning of adolescence. Formal operational thought, where individuals adopt a more systematic and scientific approach to problem solving, can be described as more hypothetical and abstract than concrete operational thought. Piaget (1972) further described that the process from concrete operational thinking during childhood to formal operational thinking in adolescence, takes place gradually over years. Therefore, it is useful to distinguish between early and late formal operations. Formal operational thought also prepares individuals to gain a sense of identity and challenges them to think extensively about their morals (Sigelman & Rider, 2018). Formal operational thinking thus assists adolescents with possible

career choices, the evaluation of their current friendships and moral development (Rodriguez & Loos-Sant'Ana, 2015), which is also an important part of identity formation.

Cognitive empathy increases during adolescence and is seen as the ability to understand other individuals' emotional state and the allowance for skilled negotiation during social interactions (Williford et al., 2016). In their study, Van Noorden, Haselager, Cillessen and Bukowski (2014) found that individuals with lower cognitive empathy levels are more prone to bully behaviour. Williford et al. (2016) agreed with Van Noorden et al. (2014) when they found that cognitive empathy decreases as levels of bullying increase. Adolescents with low cognitive empathy are thus not able to take the perspective of other individuals and find it easier to engage in bully behaviour.

Considering the cognitive changes taking place during this life stage, it is evident that adolescents are able to think more hypothetical and abstract about their identity. However, formal operational thinking is a continuous process (Piaget, 1972) and therefore it can be hypothesised that individuals who are not yet able to think on a formal operational level, might engage in risky behaviour such as bully behaviour and having challenges to form a sense of identity.

2.1.2.3 Psychosocial development.

Peers are especially important during adolescence and have a strong influence on individuals during this life stage. Adolescents strongly depend on their peers for emotional security, sometimes even more than on their parents (Plaisier & Konijn, 2013). Supportive peer groups promote healthy psychological and social development, because adolescents have a tendency to turn to their friends when angry and disappointed (Chow, Ruhl, & Buhrmester, 2014).

During adolescence, males and females choose other trustworthy and dependable individuals to befriend (Kochendorfer & Kerns, 2017). A social identity is also formed during adolescence when individuals are spending more time with friends from the opposite gender in a peer-group structure (Sigelman & Rider, 2018). However, adolescents are confronted with several social challenges while forming their identities and these social pressures may contribute to increases in bully perpetration and bully victimisation (Williford et al., 2016). Peer relationships can also have a negative influence on individuals. Adolescents are concerned about peer acceptance and highly value the appraisals and opinions of others (Louw & Louw, 2014). Therefore, peer rejection, especially in adolescence, is extremely painful. Due to a lack of emotional regulation, they respond to peer rejection with intense anger and frustration (Plaisier & Konijn, 2013). The opinions of other peers are of utmost importance and therefore, risk behaviour such as bullying is present during this life-stage.

During adolescence, peer influences can be positive or negative and parents or caregivers have a considerable effect on the outcome thereof. Adolescents have to deal with a fair amount of academic and social pressure from their parents and they often feel that they have to cope with their challenges and problems on their own (De Wet, 2012). However, adolescents who have a secure attachment with their parents or caregivers, are much less likely to get into trouble due to conforming to their peers (Sigelman & Rider, 2018). Furthermore, individuals' attachment style during the early developmental years may contribute to their social relationships during adolescence. Individuals will continuously assume that others will react exactly like their early caregiver, as attachment in early childhood provides a foundation for future behaviour (Kõiv, 2012). As an infant, a secure base provided by parents or caregivers to explore the environment is essential (Bowlby, 1969). After a few years, adolescents still value encouragement and security from their parents or caregivers to explore and become

autonomous individuals (Kocayörük, Altıntaş, & İçbay, 2015) . Szwedó et al. (2017) suggested that a healthy balance between exploration and attachment, where adolescents seek autonomy, as well as support from their parents or caregivers, contribute to successful development at this age. In addition, a secure attachment relationship with their parents or caregivers generally results in greater social competence, a higher self-esteem, better emotional adjustment, fewer behavioural problems and a stronger sense of identity than their less securely attached peers during adolescence (Szwedó et al., 2017).

A sense of belonging is a significant condition for general well-being during adolescence (Ruvalcaba, Gallegos, Borges, & Gonzalez, 2017) and therefore adolescents want to feel part of a family as well as part of their peer group. Peer influences on the development of individuals are usually healthy. However, it can be destructive and depends on the type of friends, the kind of relationship, the attachment style during early childhood and how much peer acceptance is required (Louw & Louw, 2014). Relationships are extremely important for psychosocial development during adolescence and parents and peers can be seen as active participants in adolescents' identity formation (Schachter & Ventura, 2008).

Considering the developmental challenges and tasks during adolescence, it is evident that these individuals experience unique maturation and growth in several aspects of their life. To summarise, this developmental period includes rapid changes in the body, cognitive maturation, difficulty in peer relationships, dealing with risky behaviour such as bullying, gaining a sense of autonomy in the family, identity formation and finding a place in society.

2.2 Identity Formation

Identity consists of several interrelated concepts, including social identity, cultural identity, spiritual identity, ethnic identity and gender identity (Albarello, Crocetti, & Rubini, 2018). During the life-span, individuals consider all the different elements of identity, integrate them and form a personal identity from the aspects they can't control, as well as from controllable aspects (Louw & Louw, 2014). Biological and physical characteristics cannot be controlled by individuals, while controllable aspects include what individuals believe, who their friends are, what career they want to pursue and what their values, abilities and internal beliefs are. This study focused on the development of a personal identity, specifically during adolescence. In this section, definitions and theories of identity formation are discussed.

2.2.1 Defining identity formation.

Theorist share a common view of what identity formation entails, although definitions thereof vary across literature. Thornberg (2015) defines identity as a social process that is continuously constructed through social interactions, as well as a main adolescent psychosocial developmental task. Individuals have to evaluate their own actions, find out what makes their world meaningful and build connections with other people. These connections should hopefully have a positive influence on their lives and correlate with their own values, beliefs and ideas (Thornberg, 2015). Erikson (1968) defines identity formation as a tension between synthesis and confusion and individuals are in the process to find a balance where synthesis is preferred over confusion. If a strong sense of identity synthesis is experienced, individuals will be more aware of their strengths, weaknesses and uniqueness, while identity confusion is related to a disorganised sense of self. He further added that identity formation is a process where individual choices are made and previous experiences are assimilated with new experiences, until a sense of continuity is achieved (Erikson, 1968). Saint-Eloi Cadely,

Kerpelman and Pittman (2018) define identity formation as several processes through which different options are considered (exploration) and decisions about different alternatives are made (commitment).

2.2.2 Theories on identity formation.

Erikson (1950, 1968) emphasised that identity formation is one of the crucial challenges of adolescence, because a well-constructed identity assists them in defining a purpose in their path to adulthood. He also described identity as a stable feeling of uniqueness. During the process of identity formation, individuals make their own choices and assimilate previous experiences with new experiences, until they achieve a sense of continuity (Erikson, 1950, 1968).

Considering key theories with regard to identity formation, Marcia (1966) built on two dimensions of Erikson's theory. He suggested that the two main questions when it comes to identity formation are if individuals have experienced an identity crisis and if they committed to certain roles, values and goals (Marcia, 1966). A crisis, or exploration, includes a portion of time where alternatives are examined and where individuals compare different values, goals and ideas with the purpose of committing to a specific one (Muisse, 2007). Commitment is described as a sustained unique investment and dedication to these specific values, goals and ideas (Muisse, 2007). Marcia (1966) created the identity status paradigm and classifies identity in four distinguishable statuses. Firstly, adolescents will start with no fixed identity, which indicates no crisis and no commitment and this status is known as identity diffusion (Marcia, 1966). In the second status, known as foreclosure, adolescents do not experience any identity crisis and just commit to authority figures in their culture without the exploration of alternative options (Marcia, 1966). Thirdly, in the moratorium status, Marcia (1966) proposes that a crisis will elicit a period of experiencing other identities, but still no commitment will take place.

Adolescents finally experience identity achievement when life decisions are being made and commitment follows the exploration of alternative values, goals and ideas (Marcia, 1966). Muise (2007) stated that identity diffusion and foreclosure are considered as lower order statuses, because a lack of exploration is indicated and adolescents are therefore associated with a passive identity structure. Identity achievement and moratorium, on the other hand, are seen as higher order identity statuses because exploration and comparing of identity issues are involved (Muise, 2007).

Various identity models were developed to build on Erikson's psychosocial theory (Erikson, 1950, 1968) and Marcia's identity status paradigm (Marcia, 1966). Individuals can obtain and evaluate self-relevant information in three different ways to form a personal identity (Berzonsky, 2011). Berzonsky (2011) reasoned that three different social-cognitive strategies or processing orientations are utilised to form an identity. Different social-cognitive strategies are preferred by different individuals to handle identity conflicts and decisions. Individuals with an informational style are self-reflective and evaluate self-relevant information, while those with a normative style are more prone to internalise and conform to the values of significant others. Individuals with a diffuse-avoidant style postpone dealing with identity conflicts as long as possible (Berzonsky, 2011).

Three identity processes are described and explained by Crocetti, Rubini and Meeus (2008) in the three-factor identity dimensional model. The first process, commitment, refers to continuous choices that adolescents have made about several developmental domains, as well as the self-confidence they derive from these choices. Secondly, in-depth exploration refers to the active monitoring of current commitments and a deeper understanding of one's recent choices. These two processes assist adolescents in maintaining their sense of identity which is

reinforced by active investigation of the self and environment. Lastly, the process of comparing existing, unsatisfactory, current commitments with other possible alternatives, in attempt to optimise or change these commitments, can be described as reconsideration of commitments. This last-mentioned process assists adolescents to relinquish goals that are no longer in accordance with personal desires, while it also assists them to identify new commitments (Crocetti et al., 2008). Meeus (2011) states that Erikson's (1968) psychosocial stage of identity formation vs role confusion can be recognised in the interplay between the two cycles of identity maintenance and identity formation.

A broader process-oriented model of identity formation is developed by Luyckx et al. (2008) where they distinguished between five interrelated identity processes. The model is divided into two cycles, namely the commitment formation cycle and the commitment evaluation cycle. The first cycle includes two processes, namely exploration in breadth or the pro-active exploration and commitment (Luyckx et al., 2008). Both these processes can be recognised in Marcia's (1966) processes of exploration and commitment. During the second cycle, individuals start to evaluate their commitments by means of in-depth exploration, for example by talking to others about their choices while growing confident regarding their choices (Luyckx et al., 2008). The processes of exploration in depth and identification with commitments are thus included in the second cycle. Ruminative exploration, a fifth process, was later added and can be described as a process where identity formation is delayed and takes place when individuals have feelings of uncertainty or incompetence regarding their choices.

2.2.3 Factors related to identity formation.

Although a key developmental task during adolescence is to form a clear and consistent sense of identity (Erikson, 1968), identity formation is part of social and personal development

across the lifespan. Negru-Subtirica, Pop and Crocetti (2017) emphasise that individuals' personal identities are interrelated with different conceptualisations. Identity formation is not established once, but can be modified by new experiences (Kalka & Karcz, 2016). Therefore, identity does not exist in isolation and several factors, including the environment, peers and parents contribute to identity formation.

Firstly, peers play a significant role in adolescence and during this life-stage, adolescents especially construct their identity based on relationships with others (Vervoort, Scholte, & Overbeek, 2009). Secondly, individuals' attachment styles are shaped by the first relationships they established with their environment and persist through adolescence (Pellerone, Ramaci, López, & Craparo, 2017). These attachment styles have an influence on identity formation, interpersonal relationships and decision-making processes. According to Pellerone et al. (2017), secure attachments facilitate identity formation and prevent identity diffusion, by promoting identity commitment and encouraging the exploration of identity alternatives. Markovitch, Luyckx, Klimstra, Abramson and Knafo-Noam (2017) also reason that parental attachment contributes to the identity formation of adolescents. Thirdly, the way in which parents approach adolescence, as well as their parenting style, are crucial for identity formation (Sharma & Mittal, 2017). According to Luyckx, Schwartz, Rassart and Klimstra (2016), associations have been found between parental identity formation and adolescents' identity formation. Children's commitment correlated positively with parental identification with commitment and parents are thus functioning as examples for their younger ones (Luyckx et al., 2016). Markovitch et al. (2017) reason that parental support and control also assist with identity formation in adolescents. Lastly, gender may have an influence on identity formation as males and females reach identity formation at different stages (Klimstra et al., 2010). However, Kalka and Karcz (2016) found that gender has no influence on identity formation.

According to Becht et al. (2016), there are many adolescents who do not resolve the developmental task of identity formation during adolescence and still experience identity uncertainty. Identity diffusion is often associated with behavioural problems (Sharma & Mittal, 2017), while not resolving identity formation during adolescence, might lead to an increase in depressive symptoms (Van Doeselaar et al., 2018). However, Marcia (1966) emphasised that it is unlikely for individuals to reach identity achievement before the age of 23. In their study, Pellerone et al. (2017) found that high identity exploration and commitment in adolescence lead to informed decision making where individuals consider the consequences of their choices. It can thus be hypothesised that low exploration and commitment lead to poor decision making during this life stage.

2.2.4 Gender differences in adolescent identity formation.

Conflicting findings with regard to whether gender is a contributing factor to identity formation or not were reported in previous literature. Considering identity exploration, Luyckx, Klimstra, Duriez, Schwartz and Vanhalst (2012) indicated that females scored somewhat higher than males in this domain. According to Vaccaro and Newman (2016), males who are more emotionally dependant on their parents are less likely to experience identity achievement, while emotionally independent males explored alternative identities spontaneously. In their study, Crocetti, Sica, Schwartz, Serafini and Meeus (2013) found that females explore alternative identities sooner than males.

Males and females tend to make identity commitments during middle to late adolescence (Klimstra et al., 2010). However, females have a high assurance of identity commitment in early adolescence, where commitment for males increases throughout adolescence (Klimstra et al., 2010). On the other hand, Markovitch et al. (2017) found that males scored higher than

females in making commitment. In contrast with the findings above, Seabi (2012) found no gender differences regarding identity commitment.

Klimstra et al. (2010) proposed that females are more mature in terms of identity formation and have a more stable identity profile in early adolescence than males. According to Crocetti et al. (2013), the reason for the above is that females are physically and cognitively one or two years ahead of males. However, during late adolescence, males catch up with females in terms of maturity and identity profiles (Crocetti et al., 2013). In their study, Morsünbül, Crocetti, Cok and Meeus (2016) found that adolescent males tend to be categorised in the diffusion and moratorium statuses, whereas adolescent females are more inclined to be classified in the foreclosure, moratorium and achievement statuses. In contrast with the above-mentioned findings, Hatano and Sugimura (2017) found no gender differences regarding identity formation. The inconsistent results require further research on gender differences regarding identity formation in adolescents.

In summary, identity formation is a key developmental task during adolescence, but may take place throughout the life span. Various definitions and theories were considered in this section and it was evident that adolescents who formed a well-integrated identity during adolescence, make informed decisions about their life (Muise, 2007). However, some individuals do not reach identity formation during adolescence and still experience an identity crisis during this life stage (Marcia, 1966). Identity formation takes place in a social context and therefore several factors contribute to this developmental task, including the environment, peers, parents, attachment styles and gender.

2.3 Bully Behaviour

In this section, different perspectives of bully behaviour are defined and discussed. Different types of bully behaviour were considered, as well as the role-players in bullying. A detailed discussion about gender differences with regard to adolescent bully behaviour is also included.

2.3.1 Defining the different forms of bully behaviour.

Bully behaviour in schools is internationally recognised as a public health concern among adolescents (Kozasa, Oiji, Kiyota, Sawa, & Kim, 2017). Defining the term bully behaviour is not an easy task, seeing that there is not only one clear-cut definition. Salmivalli (2010) defines bully behaviour as a subtype of aggressive behaviour where perpetrators deliberately and repetitively attack powerless victims over a long period of time. According to Gladden, Vivolo-Kantor, Hamburger and Lumpkin (2014), bully behaviour is unwanted aggressive behaviour, perpetrated often by other individuals or groups which includes a perceived power imbalance. Victims of bullying may be confronted with psychological, physical, educational or social harm (Gladden et al., 2014). Over the years, the definition of bully behaviour was expanded or modified by several researchers in the field. However, the intention to harm, repetition, power imbalance, provocation and victim distress are fundamental elements included in numerous definitions (Goldsmid & Howie, 2014). Olweus' (2013) definition of bully behaviour is widely accepted amongst different researchers. He defined bullying as a type of proactive aggressive behaviour with the intention to cause harm, an asymmetric power relationship and repetition of this behaviour over time. Olweus (2013) added that most bully behaviour occurs without apparent provocation on the part of the targeted individual. Furthermore, Rigby (2006) distinguished between malign bullying and non-malign bullying. Malign bullying can be described as intentional and malicious bullying, providing the perpetrator with much gratification, while non-malign bullying is described as behaviour that would be regarded as

an act of bully behaviour by others, but the perpetrator has no intention to hurt the victim and it is seen as accidental harm, rather than bullying (Rigby, 2006). This criteria of intend is included when describing bully behaviour to distinguish it from accidental harm (Goldsmid & Howie, 2014).

There are several types of bully behaviour, but for the purpose of this study, physical bullying and psychological bullying were investigated and discussed. Physical bullying can be described as a direct, physical attack, or the use of physical force by the perpetrator against the targeted victim (Gladden et al., 2014). Examples of physical bullying include behaviours such as stealing, punching, hitting, spitting, tripping, pushing and kicking (Boyes, Bowes, Cluver, Ward, & Badcock, 2014). Psychological bullying, also known as emotional bullying, can be described as subtle and malicious bullying against the targeted individual that causes harm. Psychological bullying take place in the form of gossiping, intentional exclusion from a group, a verbal threat, taunting, offensive written notes, inappropriate sexual comments, or spreading rumours about other individuals (Shamos, 2009).

Individuals who engage in bullying others and intend to inflict harm upon others are called perpetrators (Mohebbi et al., 2016). They strive to have power, to be in control and to enjoy the fact that others are suffering or injured. Jones, Haslam, York and Ryan (2008) suggested that certain characteristics might determine if an individual can be a possible victim or perpetrator of bully behaviour. Perpetrators are mostly unfriendly, emotionally unstable and they have a negative attitude towards their victim (Jones et al., 2008). Peeters, Cillessen and Scholte (2010) added that perpetrators might lack empathy or social understanding and can be exceptionally aggressive. In their study, Thornberg, Rosenqvist and Johansson (2012) found that adolescents see perpetrators as individuals with low self-confidence, a lack of empathy,

insecure, cruel and malicious. Kõiv (2012) found that adolescents' current attachment style with their parents can be seen as a contributing factor to whether they are involved in bully behaviour or not. Perpetrators scored higher in insecure-avoidant attachment scales than victims or non-participants of bullying (Kõiv, 2012). Considering the consequences of bully behaviour, victims aren't the only individuals who are harmed when bully behaviour occurs. Long-term consequences of being a perpetrator include continued externalising behaviour problems and maladjusted relationships (Lee, Liu, & Watson, 2016).

Victims are on the receiving end of bully behaviour (Perlus et al., 2014). Victims have a tendency to be slightly "different" in the eyes of their peers and can be described as submissive, vulnerable, might have poorer problem-solving skills, have an exploitable weakness and are usually disliked by their peers with only a few friends (Jones et al., 2008; Pouwels, Lansu, & Cillessen, 2016). Being a victim of bully behaviour may result in serious consequences such as academic and emotional difficulties, low self-esteem, increased depression, relationship problems (Jones et al., 2008) as well as several other psychological and physical consequences (Boyes et al., 2014). Victims may also experience high levels of psychological distress, engage in unhealthy behaviour, have less support from teachers and parents and a lower perceived social identity (Cassidy, 2009). Furthermore, Cassidy (2009) stated that victimisation leads to a number of suicide cases and some learners experience symptoms of posttraumatic stress disorder. When a child experiences victimisation, there is also an increased risk for self-harm (Perlus et al., 2014). Considering the attachment style of victims of bully behaviour, victims demonstrated higher levels of insecure attachment than perpetrators and non-participants of bullying (Kõiv, 2012).

In addition to perpetrators and victims of bully behaviour respectively, it is also possible for individuals to be seen as perpetrator-victims of bullying. Those who engage in bully behaviour and are at the receiving end of bullying as well, are seen as perpetrator-victims (Cassidy, 2009). They are sometimes found to be the most aggressive sub-group of bully behaviour (Peeters et al., 2010; Shao, Liang, Yuan, & Bian, 2014) and usually have higher levels of aggression and depression (Shao et al., 2014). Furthermore, perpetrator-victims have a low self-esteem, low social acceptance, poor self-control, low academic competence and poor prosocial behaviour (Shao et al., 2014).

Considering that bully behaviour is widely recognised as a serious health problem (Huang & Cornell, 2015), a variety anti-bullying programs are currently implemented at schools. These programmes include methods to prevent bullying, how to avoid bully behaviour, how to identify bullying, guidance regarding bullying for teachers and what to do if one suspects bully behaviour in the school (Galitz & Robert, 2014),

2.3.2 Gender differences in adolescent bully behaviour.

According to international and South African literature, there are gender differences amongst adolescents and more specifically, with regard to bully behaviour. In the next section, gender differences regarding physical and psychological bullying are discussed, as well as gender differences from the perspective of victims and perpetrators.

Males tend to engage more in direct forms of bullying like physical bullying, whether as perpetrators or as victims, than females (Lapidot-Lefler & Dolev-Cohen, 2015; Lehman, 2014; Lucia, 2016). Males are also involved in more direct, visible bullying to establish dominance in larger peer groups. Kljakovic et al. (2015) proposed that bullying is in general more common

among males than females. This may be ascribed to the fact that males tend to be involved in physical bullying, while females are more involved in psychological bullying, which is more difficult to observe (Kljakovic et al., 2015). According to Boyes et al. (2014), males tend to experience more physical bullying victimisation than females, while Smith (2014) reported that males are more involved in physical bullying perpetration. However, Fox, Jones, Stiff and Sayers (2014) indicated that males and females are equally physically bullied and that gender does not make a difference in this regard.

Considering psychological bullying, females are as likely (Connell, Schell-Busey, Pearce, & Negro, 2013; Smith, Thompson, & Bhatti, 2012), or even more likely (Arslan, Hallett, Akkas, & Akkas, 2012; Smith, Polenik, Nakasita, & Jones, 2012) than males to employ and experience indirect forms of bullying. Looking at the psychosocial development during early adolescence, females usually prefer smaller and more intimate friendships (Scheithauer, Hayer, Petermann, & Jugert, 2006). Therefore, they might prefer to participate in psychological bullying to hurt someone more effectively and to surround themselves with psychological attacks like gossip and attacking of emotions (Lehman, 2014). However, Boyes et al. (2014) found that males experience more verbal bullying victimisation than females.

There are contrasting findings about whether gender differences are present with regard to bully victimisation or not. According to Lapidot-Lefler and Dolev-Cohen (2015) and Callaghan, Kelly and Molcho (2014), males are more frequently victims of bullying compared to females. According to Rueger and Jenkins (2014) and Boyes et al. (2014), males tend to experience more physical and psychological bullying victimisation than females. Boyes et al. (2014) found no gender differences in bully victimisation in total, but in specific bully victimisation categories such as physical victimisation and psychological victimisation. In

contrast, Kahle and Peguero (2015) and Reddy et al. (2013) stated that the opposite is true. Thornberg and Knutsen (2011) determined that males are significantly more likely to assign bullying causes to the victim and much less to the perpetrator, than females.

Thornberg and Knutsen (2011) found in their study that, although more males than females indicated that they were perpetrators of bullying, the difference was not significant. However, Smith, López-Castro, Robinson and Görzig (2018) found that males across all age groups during adolescence were significantly more perpetrators of bullying than females. Cook, Williams, Guerra, Kim and Sadek, (2010) reported that bully perpetration are usually under-reported, but tends to be more prevalent amongst males. According to Scheithauer et al. (2006), 12.1% of adolescents in their study admitted that they were perpetrators of bully behaviour, while 11.1% saw themselves as victims and 2.3% declared that they were perpetrator-victims.

The underreporting of bullying amongst males were considered, however, it was found that this behaviour is underreported by both genders (Huang & Cornell, 2015). According to Huang and Cornell (2015), reporting of bully victimisation depends on the way that questions are asked in surveys and not on gender. Considering these conflicting findings with regard to gender differences in bully behaviour, it is vague whether gender differences in South Africa would be consistent with international literature.

2.4 Identity Formation, Bully Behaviour and Gender as a Possible Moderator

Peer groups are very important during adolescence, especially for the formation of a social identity (Sigelman & Rider, 2018). Adolescents are faced with several social challenges while forming their identities and these social pressures may contribute to increases in risk behaviour, such as bully perpetration and bully victimisation (Williford et al., 2016). During adolescence,

individuals value the opinion of their peers much more than the opinion of their parents (Plaisier & Konijn, 2013) and therefore they will be involved in certain activities to gain acceptance from their peers, although their involvement in the activities is not a reflection of their true self. Venter and Du Plessis (2007) reasoned that individuals might become so dependent on their peer group for approval that they lose their individuality and their own identity to such an extent that their behaviour is a function of group will and as a result, risky behaviour such as bullying occurs relatively easy. It can thus be hypothesised that there is a relationship between identity formation and bully behaviour among adolescents.

According to the social identity theory, individuals have a desire to identify with members of different social groups in order to have a better self-esteem (Tajfel & Turner, 1979). Through comparing similarities and differences with out-group members, individuals establish and maintain a positive social identity. When individuals start to identify with their group, they become motivated to behave in a way that represents their group identity (Tajfel & Turner, 1979). Furthermore, the identity status of individuals is one of the key contributors of their chances of being involved in bully behaviour, whether as perpetrators or victims. Cassidy (2009) proposed that the best predictors of victimisation of bullying are problem-solving styles, family situations, gender and social identity. According to the social identity theory, a sense of positive social identity is associated with positive self-esteem, while a sense of negative social identity is associated with low self-esteem. In cases of bullying, victims report the lowest levels of social identity, low self-esteem and poor behaviour levels. Individuals with a weak social identity tend to identify poorly with a group of friends and are therefore even more at risk for being victims of bully behaviour (Cassidy, 2009). Victims usually internalise the reasons for being bullied and therefore may not have a strong sense of identity, or express ambivalence towards their own identity (Sharkey et al., 2015). It can thus be hypothesised that a weak

identity leads to an increase in bully victimisation. According to Gini (2006), adolescents tend to show favouritism to in-group members, while discriminating against out-group members because they are different. Adolescents who bully others, also rationalise this behaviour by saying that victims deserve the bullying because they are different than the rest of the peer group (Thornberg, 2015). It is thus possible that a weak identity leads to an increase in bully perpetration as well.

According to Van Hoof et al. (2008), bullying affects the victims' identity status, which results in poor psychological health. They also stated that adolescents who are victims of bullying, struggle to integrate their school, home and leisure time identities into one coherent identity. Van Hoof et al. (2008) further reason that bully victimisation by peers, affects adolescents' personal identity (Van Hoof et al., 2008). According to Riley (2018), adolescents who are not comfortable with their gender identity are at great risk for bully victimisation and rejection from others. Furthermore, Serdari, Gkouliama, Tripsianis and Proios (2017) reasoned that adolescents are victims of bullying due to their ethnic identities. It is thus possible that the above-mentioned adolescents did not reach identity formation and that adolescents with a weak sense of identity are more at risk of being victims of bully behaviour. Vera, Kordesh and Polanin (2018) reasoned that adolescents with a strong sense of cultural identity will be less involved in bully behaviour, especially as perpetrators, while adolescents who were victims due to their cultural identity are at risk to become perpetrators. Furthermore, Vera et al. (2018) stated that adolescents who scored low on ethnic identity, would have an increased likelihood of becoming perpetrators or victims of bully behaviour. It can thus be hypothesised that a weak sense of identity among adolescents will lead to an increase in bullying, whether as perpetrators or victims.

Gender is a contributing factor in both identity formation and bully behaviour. As discussed earlier in the study, previous literature suggested that gender does play a role in identity formation (Klimstra et al., 2010; Luyckx et al., 2012; Markovitch et al., 2017) and bully behaviour (Callaghan et al., 2014; Lapidot-Lefler & Dolev-Cohen, 2015; Lehman, 2014; Lucia, 2016; Thornberg & Knutsen, 2011) respectively. According to Luyckx et al. (2012), females start exploring identity alternatives sooner than males and scored higher than males in this domain. Klimstra et al. (2010) reasoned that females are more mature regarding identity formation in early adolescence, while Crocetti et al. (2013) stated that the above-mentioned statement is true, due to the fact that females are physically and cognitively two years ahead of males. However, exploration of a new identity status as a female is accompanied by social challenges from peers (Williford et al., 2016). Females usually prefer smaller and more intimate friendships and therefore, when confronted with social challenges by their peer group, while still having a weak sense of identity, they will rather participate in psychological bullying to hurt others more effectively, than physical bullying (Lehman, 2014). According to Smith et al. (2012), females are more inclined to engage in psychological bullying than males, whether as victims or perpetrators. It can thus be hypothesised that, during identity formation, females are more likely to engage in psychological bullying than physical bullying.

Males are two years behind females regarding identity formation and still have instable identity profiles during adolescence (Klimstra et al. 2010). During this life stage, high testosterone levels are also present which result in males having high levels of aggression during adolescence (Vijayakumar et al., 2018). Furthermore, Lehman (2014) stated that males are much more involved in physical bullying than females. During adolescence, males who are still forming their identities and still having a weak sense of identity, might thus engage more in physical bullying than psychological bullying. It can thus be hypothesised that, during

identity formation, males are more likely to engage in physical bullying than psychological bullying and that gender does moderate the relationship between identity formation and bully behaviour.

Considering the arguments above, it is hypothesised in this study that a significant amount of variance in bully behaviour can be explained by identity formation and that gender does moderate the relationship between these two constructs.

2.5 Chapter Summary

The term adolescence was defined and discussed in this chapter, while the complexity of the term was emphasised. The developmental tasks during adolescence, which were discussed in terms of the physical, cognitive and psychosocial domain, were reviewed. Furthermore, identity formation and bully behaviour were defined and discussed in detail. In conclusion, a discussion about the relationship between identity formation and bully behaviour, as well as gender as a possible moderator in the relationship, were included.

Chapter 3 - Methodology

In this chapter, a summary of the methodology employed in this research study is given. Firstly, the research aims and questions are stated. Secondly, the research approach and design are described. In the third, fourth and fifth sections, the participants involved and the sampling procedures are explained, as well as the data collection procedures and data analysis. Finally, relevant ethical considerations are discussed.

3.1 Research Aim and Questions

An in-depth discussion of the need to conduct research on the relationship between identity formation and bully behaviour was provided in the literature review. The aim of this study was to investigate the relationship between identity formation and bully behaviour from the perspective of the victim and the perpetrator and whether gender plays a moderating role in the relationship between identity formation and bully behaviour.

The research questions for this study is as follow:

1. Can a significant amount of the variance in bully behaviour be explained by identity formation?
2. Does gender moderate the relationship between identity formation and bully behaviour?

Considering the first research question, it was hypothesised that a significant amount of variance in bully behaviour can be explained by identity formation among adolescents in the Free State. It was hypothesised that individuals who engage in bullying others and who intend to inflict harm upon others, also known as perpetrators, have a weak sense of identity and therefore they engage in bully behaviour. Furthermore, it was hypothesised that individuals who are on the receiving end of the bully behaviour, also known as victims, have a weak sense of identity and therefore they feel that they deserve to be bullied.

With regard to the second research question, it was hypothesised that gender (male and female) does play a moderating role in the relationship between identity formation and bully behaviour among adolescents in the Free State.

3.2 Research Approach and Design

A quantitative approach was utilised to investigate the relationship between bully behaviour and identity formation among adolescents in the Free State. Furthermore, a non-experimental research type (Stangor, 2015) was followed and a descriptive and a correlational design (Howell, 2014) was utilised.

The quantitative approach includes statistical methods and techniques (Antonius, 2013), allows the testing of hypotheses and has the advantage of producing objective and empirical data, while the results can be generalised to large populations (Rahman, 2016). However, a limitation of the chosen approach is that it is less detailed than qualitative research because the contextual nature of a research question cannot be explored in depth (Brent & Kraska, 2010).

Non-experimental research type studies do not involve manipulation of an independent variable or the random assignment of participants to groups (Gravetter & Forzano, 2009; Price, 2012) and variables are studied as they exist (Price, 2012). However, true cause and effect relationships cannot be established, because participants are not assigned randomly (Price, 2012). In this study, a non-experimental research type was chosen since no manipulation of the independent variable took place and variables were studied as they exist naturally.

A descriptive research design is a scientific method which involves observing and describing a set of variables or an individual variable, without influencing it in any way (Gravetter & Forzano, 2009). In this study, the aim was to gain more information and insight

on specific constructs, instead of providing definite, explanatory research questions (Neuman, 2014). Disadvantages of descriptive research include the lack of ability to predict or determine what caused the specific behaviour (Stangor, 2015). A descriptive research design was chosen for this study to depict and describe various variables, their manifestation in certain groups and the relationships between them.

A correlational design (Stangor, 2015) was employed to investigate the relationship between the variables' identity formation and bully behaviour. The strength and direction of the relationship between specific variables can also be determined by correlational research. However, a limitation of this design is that no reason for why the relationship exists can be provided (Stangor, 2015).

3.3 Participants and Sampling Procedures

Identity formation usually takes place during adolescence (Erikson, 1968) and therefore the study focused on adolescents in the Mangaung area in the Free State, South Africa. Newman and Newman (2017) categorise adolescence into early adolescence (12-18 years) and later adolescence (18-24 years). Adolescents between the ages of 14-19 years attending school in the Mangaung area of Bloemfontein participated in this study.

Non-probability convenience sampling (Stangor, 2015) was utilised for the recruitment of participants. Convenience sampling can be described as a non-probability sampling method by which participants are selected in terms of availability at a certain place and time (Springer, 2010). This method is time-effective, but might not be representative of the population (Price, 2012; Springer, 2010). The research incorporated 168 participants and all gender groups as well as all ethnic groups could take part in the study. Individuals who were not comfortable

with English or who did not want to take part in the study, were excluded. In Table 1, the distribution of the sample with regard to gender, age and language is summarised.

Table 1

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

Biographic characteristic		Frequency (N)	Percentage (%)
Gender	Male	82	48.8
	Female	86	51.2
	Total	168	100
Age	14	17	10.1
	15	35	20.8
	16	36	21.4
	17	36	21.4
	18	20	11.9
	19	24	14.3
	Total	168	100
Language	Sesotho	130	77.4
	Setswana	20	11.9
	isiXhosa	10	6.0
	Zulu	1	0.6
	Other	7	4.2
	Total	168	100

Considering Table 1, participants were represented relatively equally with regard to gender. Males formed part of 48.8% of the sample and 51.2% of the sample consisted of females. More than half of the participants (63.6%) were between 15 and 17 years and most of the participants (77.4%) were Sesotho-speaking. It is further also evident that the population group was a homogeneous group in terms of ethnicity.

3.4 Data Collection Procedures

The data collection was conducted through self-report questionnaires. Self-report questionnaires are easily administered to collect a large amount of credible information while generalisation of the findings is possible. However, limitations include doubt about the truthfulness of the participants, as well as the possibility that questions can be interpreted

differently by different individuals (Lance & Vandenberg, 2009). The use of questionnaires ensured that the data was collected in the same manner for each participant while the identity of the participants was kept confidential. The questionnaires were completed early in the morning during school hours and took 35-50 minutes to complete. Assistance was available during the data collection procedure and participants were encouraged to ask for support when necessary. Considering that this research study was part of a bigger project, more than one person was available for assistance during the data collection procedure.

The self-report questionnaires included a biographic section and two measuring instruments regarding identity formation and bully behaviour (Appendix A). Each of these instruments is discussed in detail below.

3.4.1 Biographic questionnaire.

In the self-compiled biographic section of the survey (See Appendix A), participants provided their age, language, grade and gender group.

3.4.2 Ego Identity Process Questionnaire (EIPQ).

Balistreri et al.'s (1995) *Ego Identity Process Questionnaire (EIPQ)* (See Appendix A) was employed to measure identity formation among adolescents. The questionnaire is a self-report identity inventory that measures Marcia's dimensions of exploration and commitment in two subscales. The scale consists of 32 six-point Likert-scale items with two subscales of 16 items each. The minimum score that a person can get for a total identity formation score is 32, while the maximum score is 192. The scores of negatively worded statements were reversed. Higher scores indicate identity achievement (high exploration and high commitment). Cronbach alpha coefficients of .75 for the commitment scale and .76 for the exploration scale in a study with

271 undergraduate students in the south-eastern United States were obtained by Balisteri et al. (1995). In Germany, the *EIPQ* was utilised to measure identity processes in German adolescents and the Cronbach's alphas were .71 for exploration and .68 for commitment (Pinquart & Pfeiffer, 2013).

In this study, after initial analysis, the *EIPQ* did not have high internal consistency and the reliability was only .49. Therefore, an item analyses was done and problematic items with the lowest internal consistency were deleted. The final questionnaire consisted of 18 items, with a reliability of .67. For this shortened version, the minimum score than an individual could obtain for identity formation was 18 and the maximum score was 108.

3.4.3 Forms of Bullying Scale (FBS).

In order to measure bully behaviour, Shaw et al.'s (2013) *Forms of Bullying Scale (FBS)* with versions to measure bullying victimisation (*FBS-V*) and perpetration (*FBS-P*) (See Appendix A) was employed. It is a multi-item scale to measure bully behaviour among adolescents and it utilises five response options from "This did not happen to me/I did not do this" to "Several times a week or more". The *FBS* consists of eight psychological bullying items and only two physical bullying items. Therefore, the *Physical and Psychological Bullying Measures (PPBM)* (Yahner et al., 2015), a questionnaire that categorises bullying into two groups, namely physical bullying and psychological bullying, was also utilised. The *PPBM* consists of two categories (physical bullying and psychological bullying) with four physical bullying items and four psychological bullying items. In this study, the *PPBM*'s categories of bullying (psychological and physical) were used to categorise the *FBS* into physical factors and psychological factors. The four physical bullying items of the *PPBM* were added to the *FBS* to measure the occurrence of physical bullying, amongst perpetrators and victims of bully

behaviour respectively. The four psychological bullying items on the *PPBM* were already mentioned in the *FBS*.

The adapted version of the *FBS* used in this study thus consisted of 28 items in total, categorised into two subscales with 14 items each. One subscale contains items with regard to victimisation of bullying (*FBS-V*) and the second subscale contains items regarding perpetrators (*FBS-P*). In the two subscales respectively, there are six items regarding *physical* forms of bullying (two items from the *FBS* and four items from the *PPBM*) and eight items with regard to *psychological* forms of bullying (eight items originally from the *FBS*). The minimum score that individuals can obtain for the *Forms of Bullying Scale-Victim (FBS-V)* and *Forms of Bullying Scale-Perpetrator (FBS-P)* respectively is 14, while the maximum score is 70. The minimum score that a person can obtain for the *FBS-V Physical* and *FBS-P Physical* respectively is six and the maximum score is 30. The minimum score that an individual can obtain for the *FBS-V Psychological* and *FBS-P Psychological* respectively is eight, while the maximum score is 40. A low score on any of the bully behaviour subscales indicates that the specific bully behaviour doesn't take place often, while a high score indicates that the participant is a victim or perpetrator of bully behaviour. Cronbach's alpha values for both the *FBS-V* and *FBS-P* displayed high internal consistency reliability of 0.87 for a study in Perth, Western Australia, using 3496 grade eight learners as a population group (Shaw et al., 2013). Strong associations between the *FBS-V* and *FBS-P* and separate single item bullying items demonstrated adequate concurrent validity. In this study, the *FBS-V* and *FBS-P* also displayed a high internal consistency of .742 and .79 respectively and a reliability of .86 for the total scale (Shaw et al., 2013). In Table 2, a summary is provided of the bully behaviour items used in this study.

Table 2

The Final Version of the Forms of Bullying Scale (FBS) used in this Study

Perspective	Type of bully behaviour	Item	Original scale
Victim	Physical	I was a victim of pushing and shoving	<i>PPBM</i>
		I was hit or kicked	<i>PPBM</i>
		Someone thrown something at me	<i>PPBM</i>
		I was physically threatened with hurt or harm	<i>PPBM</i>
		I was deliberately hurt physically by someone and/or by a group ganging up on me	<i>FBS</i>
		My things were deliberately damaged, destroyed or stolen	<i>FBS</i>
	Subscale range: 6-30 (<i>FBS-V Physical</i>)		
	Psychological	I was teased in nasty ways	<i>FBS</i>
		Secrets were told about me to others to hurt me	<i>FBS</i>
		I was hurt by someone trying to break up a friendship	<i>FBS</i>
		I was made to feel afraid by what someone said he/she would do to me	<i>FBS</i>
		I was called names in nasty ways	<i>FBS</i>
		Someone told me he/she wouldn't like me unless I did what he/she said	<i>FBS</i>
		Others tried to hurt me by leaving me out of a group or not talking to me	<i>FBS</i>
Lies were told and/or false rumours spread about me by someone, to make my friends or others not like me		<i>FBS</i>	
Subscale range: 8-40 (<i>FBS-V Psychological</i>)			
Perpetrator	Physical	I was pushing and shoving others	<i>PPBM</i>
		I hit or kicked others	<i>PPBM</i>
		I throw something at others	<i>PPBM</i>
		I physically threatened others with hurt or harm	<i>PPBM</i>
		I deliberately physically hurt or ganged up on someone	<i>FBS</i>
		I deliberately damaged, destroyed and/or stole someone's things	<i>FBS</i>
	Subscale range: 6-30 (<i>FBS-P Physical</i>)		
	Psychological	I teased someone in nasty ways	<i>FBS</i>
		I told secrets about someone to others to deliberately hurt him/her	<i>FBS</i>
		I hurt someone by trying to break up a friendship they had	<i>FBS</i>
		I deliberately frightened or threatened someone	<i>FBS</i>
		I called someone names in nasty ways	<i>FBS</i>
		I told someone I would not like them unless they did what I said	<i>FBS</i>
		I tried to hurt someone by leaving them out of a group or by not talking to them	<i>FBS</i>
I told lies and/or spread false rumours about someone, to make their friends or others not like them		<i>FBS</i>	
Subscale range: 8-40 (<i>FBS-P Psychological</i>)			

The final version of the bullying questionnaire used in this study consists of all the items from the *FBS* and four items of the *PPBM*.

3.5 Data Analysis

The reliability of the measures in this study, the *EIPQ* and the *FBS*, was determined by Cronbach's alpha coefficient (Howell, 2014). Acceptability of reliability coefficients vary across the different disciplines, but acceptable coefficients in the social sciences range between .6 and .7 (Foxcroft & Roodt, 2013).

Descriptive statistics provide a depiction of the characteristics of a large assortment of data and thus, all the categorical and continuous data were summarised and described. Frequency distributions were utilised for the biographic data and descriptive statistics were completed for the continuous data (which included the measurements related to the evaluation of bully behaviour and identity formation), in the form of score ranges, means and standard deviations.

Firstly, the Pearson product-moment correlation coefficient was utilised (Howell, 2014) to measure the relationship between identity formation and bully behaviour. Six subscales of bully behaviour, namely Bully Victim Total, Bully Victim Psychological, Bully Victim Physical, Bully Perpetrator Total, Bully Perpetrator Psychological and Bully Perpetrator Physical were included and the correlation between the two main variables, as well as the correlation between the different bully behaviour subscales were measured. Secondly, moderated regression analyses were utilised to determine the role of gender in the relationship between identity formation and the different bully behaviour subscales. Regression can assist with prediction, inference, hypothesis testing and modelling of casual relationships (Macdonald & Headlam, 2008). In this study, bully behaviour (with its six subscales) was the

dependant variable, identity formation was the independent variable and gender was the moderating variable. Before the regression analyses were started, raw scores of all continuous variables were transformed into standard scores. Cross-products of gender and identity formation were calculated to investigate the moderator effect of gender.

3.6 Ethical Considerations

All individuals have to be treated with respect (Allan, 2016), while the human rights of participants, as well as the central importance of freedom of inquiry and expression, should be protected by researchers (Stangor, 2015). Also, it is imperative to ensure that approved research protocol is obtained prior to conducting research (Stangor, 2015). Authorisation to conduct this study was obtained from the Research Ethics Committee of the Faculty of the Humanities of the University of the Free State (UFS-HUM-2013-30) (Appendix B) and the Free State Department of Education (Appendix C). The principal of the school where data collection took place also gave permission that the research could be conducted (Appendix D).

Informed consent (Appendix E) of each student was obtained and the participants were aware that they could withdraw if they felt uncomfortable during the process. Informed consent is an agreement where participants in the study indicate their willingness to take part after they have been informed about the research procedure (Neuman, 2012). Informed consent forms were provided before the research process started and included an explanation of the purpose of the study, as well as what the results would be used for.

In this study, attention was given to confidentiality, as well as anonymity of the research participants. During a research process, intimate details with regard to the individuals' beliefs, background and behaviour were collected (Neuman, 2012) and therefore the identity of

individuals who participated was kept anonymous and was not included in the description or interpretation of the results.

During the research process, the justice principle (Allan, 2016) was considered and therefore all participants were treated fairly throughout the process. The justice principle states that psychologists should treat people without favouritism or unfair discrimination (Allan, 2016). No discrimination took place when selecting participants and all the learners in class were allowed to take part in the study.

The principles of non-maleficence and beneficence were considered during the study. These concepts refer to the responsibility of researchers to ensure that no harm comes to participants as a direct or indirect consequence of the research study (Allan, 2016). Necessary steps were taken to guarantee that the participants were not harmed during the process including that participation was voluntarily, anyone was allowed to withdraw from the study at any point in time and all information was treated confidentially. Debriefing sessions were also made available for participants if needed.

3.7 Chapter Summary

An overview of the methodology employed was given in this chapter. The aim of the research was stated, followed by the research questions that were investigated. A non-experimental type, quantitative approach and correlational design were used to achieve the aim of the study. The non-probability sampling method and convenience sampling were discussed and an overview was given regarding the biographic information of the participants. The data collection procedure, namely self-report questionnaires, was also explained in this chapter. The

method of data analysis was considered and lastly, attention was given to relevant ethical considerations in the study.

Chapter 4 – Results and Discussion

Chapter 4 focuses on the results obtained during the study. Firstly, the results are presented and thereafter, the obtained results are discussed in relation to previous findings and existing literature in the field.

4.1 Results

The descriptive and inferential statistics are included in this section. Firstly, a summary of the descriptive statistics is presented, followed by inferential statistics regarding the relationship between identity formation and bully behaviour as well as gender as a possible moderator in the relationship between the two variables.

4.1.1 Descriptive statistics.

In Table 3, the minimum, maximum, mean and standard deviation scores for identity formation and bully behaviour of both genders, as well as the total group are summarised.

Table 3

Descriptive Statistics for Identity Formation and Bully Behaviour

		Minimum	Maximum	Mean	Std. Deviation
Identity Formation	Males	45	104	75.73	11.673
(Score range 18-108)	Females	52	100	75.62	10.521
(Scale midpoint: 63)	Total	45	104	75.68	11.066
Bully Victim Total	Males	14	58	29.71	10.445
(Score range 14-70)	Females	14	51	29.97	9.371
(Scale midpoint: 42)	Total	14	58	29.84	9.881
Bully Victim Physical	Males	6	29	12.12	4.892
(Score range 6-30)	Females	6	23	11.21	3.601
(Scale midpoint: 18)	Total	6	29	11.65	4.292
Bully Victim Psychological	Males	8	33	17.59	6.639
(Score range 8-40)	Females	8	37	18.76	6.942
(Scale midpoint: 24)	Total	8	37	18.18	6.801
Bully Perpetrator Total	Males	14	58	23.89	9.372
(Score range 14-70)	Females	14	49	22.50	7.459
(Scale midpoint: 42)	Total	14	58	23.18	8.450
Bully Perpetrator Physical	Males	6	26	10.54	4.672
(Score range 6-30)	Females	6	22	9.12	3.190
(Scale midpoint: 18)	Total	6	26	9.81	4.034
Bully Perpetrator Psychological	Males	8	32	13.35	5.518
(Score range 8-40)	Females	8	28	13.38	4.997
(Scale midpoint: 24)	Total	8	32	13.37	5.242

From Table 3 it is evident that, for identity formation, the *EIPQ* range from 18 to 108, while participants' scores ranged from 45 to 104. If a scale midpoint on the *EIPQ* of 63, a sample mean of 75.68 and a standard deviation of 11.066 are considered, the scores of participants in this sample are in the higher ranges of the scale.

Results regarding the victims of bullying are as follows: with regard to the *FBS-V Total score* (with a possible score range from 14 to 70), participants' scores ranged from 14 to 58. A scale midpoint on the *FBS-V* of 42, a sample mean of 29.84 and a standard deviation of 9.881 are obtained. Hence, the participants in this sample scored in the lower ranges of the scale. The same tendencies were observed in the two subscales of the *FBS-V*. For both the physical and psychological subscales, participants reported scores in the lower ranges of the scale.

With regard to the perpetrators of bullying, the results are as follows: considering the *FBS-P total score*, the score range from 14 to 70 and participants' scores ranged from 14 to 58. A

scale midpoint on the *FBS-P* of 42, a sample mean of 23.18 and a standard deviation of 8.450 are obtained. Consequently, the scores of participants in this sample are in the lower ranges of the scale. The same tendencies were observed in the two subscales (physical and psychological) of the *FBS-P* where the participants scored in the lower ranges of the scale.

Considering the descriptive statistics, it is evident that the participants scored in the higher ranges of the scale with regard to identity formation and in the lower ranges of the scale regarding bully behaviour.

4.1.2 Inferential statistics.

Inferential statistics are utilised to answer research questions and to generalise results from the sample to the population (Howell, 2014). This section includes the results of the inferential statistics regarding the relationship between identity formation and bully behaviour, as well as gender as a possible moderator in the relationship between the two variables.

4.1.2.1 Results pertaining to the relationship between identity formation and bully behaviour (Research Question 1).

The Pearson product-moment correlation (r) was utilised to establish whether there were significant relationships between identity formation and bully behaviour. Identity formation (total score) was correlated with bully behaviour from the perspective of the victim (including physical bullying, psychological bullying and a total score) and bully behaviour from the perspective of the perpetrator (including physical bullying, psychological bullying and a total score). Correlations for the total sample, as well as for males and females separately, were considered. In Table 4, a correlation matrix is provided.

Table 4

Correlations between Identity Formation and the Various Forms of Bully Behaviour

Identity Formation (Total sample)	Bully Victim Physical	Bully Victim Psychological	Bully Victim (full scale)	Bully Perpetrator Physical	Bully Perpetrator Psychological	Bully Perpetrator (full scale)
	.111	.162*	.160*	.001	-.043	-.026
Identity Formation (Males)	Bully Victim Physical	Bully Victim Psychological	Bully Victim (full scale)	Bully Perpetrator Physical	Bully Perpetrator Psychological	Bully Perpetrator (full scale)
	.072	.188	.153	-.025	-.055	-.045
Identity Formation (Females)	Bully Victim Physical	Bully Victim Psychological	Bully Victim (full scale)	Bully Perpetrator Physical	Bully Perpetrator Psychological	Bully Perpetrator (full scale)
	.169	.138	.167	.040	-.030	-.003

* $p < 0.05$

For the total sample, identity formation correlated significantly on the 5% level with bully behaviour (full scale) from the perspective of the victim ($r = .160$; $p < .05$), meaning that 2.56% of bully behaviour from the perspective of the victim can be explained by identity formation. Specifically psychological bullying from the perspective of the victim ($r = .162$; $p < .05$) correlated significantly with identity formation, with 2.62% of its variance being explained by identity formation. All the other relationships were not significant. For the two groups split by gender, no statistically significant correlations were found.

In addition to the above, the inter-correlations between the various forms of bullying were also calculated (see Table 5).

Table 5

Correlations between the Various Forms of Bully Behaviour

	Bully Victim Physical	Bully Victim Psychological	Bully Victim (full scale)	Bully Perpetrator Physical	Bully Perpetrator Psychological	Bully Perpetrator (full scale)
Bully Victim Physical	1	.565**	.823**	.442**	.472**	.476**
Bully Victim Psychological		1	.934**	.308**	.360**	.370**
Bully Victim (full scale)			1	.404**	.433**	.462**
Bully Perpetrator Physical				1	.654**	.883**
Bully Perpetrator Psychological					1	.932**
Bully Perpetrator (full scale)						1

* $p < = 0.01$

Considering Table 5, it is evident that significant correlations exist between the various forms of bullying. All these correlations were positive and significant on the 1% level of significance. This implies that there is a strong positive relationship between being a victim and being a perpetrator of bullying, as well as a strong positive relationship between physical and psychological forms of bullying.

4.1.2.2 Results pertaining to gender as a moderator in relationship between identity formation and bully behaviour (Research Question 2).

To investigate the second research question, six moderated regression analyses were utilised to determine the moderating role of gender (male and female) in the relationship between identity formation and the various forms of bully behaviour. Three regression analyses were done with regard to the victims of bully behaviour (total score, physical bullying and psychological bullying), as well as three regression analyses with regard to the perpetrators of bullying (total score, physical bullying and psychological bullying).

Table 6

Model Summary for Gender as Moderator

Model	Change statistics			R ² change	F Change	df1	df2	p
	R	R ²	Std. Error of Estimate					
Bully Victim Total	.160	.026	.990	.026	2.180	2	165	.116
Bully Victim Total x Gender	.161	.026	.993	.000	.009	1	164	.927
Bully Victim Psychological	.162	.026	.990	.026	2.238	2	165	.110
Bully Victim Psychological x Gender	.164	.027	.992	.001	.104	1	164	.747
Bully Victim Physical	.122	.015	.996	.015	.015	2	165	.292
Bully Victim Physical x Gender	.131	.017	.997	.002	.394	1	164	.531
Bully Perpetrator Total	.023	.001	1.002	.001	.045	2	165	.956
Bully Perpetrator Total x Gender	.031	.001	1.01	.000	.071	1	164	.790
Bully Perpetrator Psychological	.044	.002	1.002	.002	.147	2	165	.863
Bully Perpetrator Psychological x Gender	.044	.002	1.01	.000	.026	1	164	.872
Bully Perpetrator Physical	.008	.000	1.003	.000	.006	2	165	.995
Bully Perpetrator Physical x Gender	.033	.001	1.01	.001	.169	1	164	.681

From Table 6, it is clear that gender did not yield a significant moderating role in any of the six regression analyses. No significant moderator effects were found for bully victimisation [R^2 change = .000, $F_{(1,164)} = .009$, $p = .927$], psychological bullying victimisation [R^2 change = .001, $F_{(1,164)} = .104$, $p = .747$], physical bullying victimisation [R^2 change = .002, $F_{(1,164)} = .394$, $p = .531$], bully perpetration [R^2 change = .000, $F_{(1,164)} = .071$, $p = .790$], psychological bullying perpetration [R^2 change = .000, $F_{(1,164)} = .026$, $p = .872$] and physical bullying perpetration [R^2 change = .001, $F_{(1,164)} = .169$, $p = .681$].

Considering Table 6, it is evident that gender does not play a moderating role in the relationship between identity formation and bully behaviour.

4.2 Discussion of the Results

Results presented in the previous section are discussed in relation to the appropriate theoretical framework. Firstly, interesting aspects regarding the descriptive statistics are highlighted. Secondly, the relationship between identity formation and bully behaviour is discussed, followed by a discussion about the moderating role of gender in the relationship between the two constructs.

4.2.1 Descriptive statistic tendencies.

The participants in the study scored relatively high on identity formation. This finding was in contrast with what was expected in the study due to the fact that the population group ranged from ages 14-19 with younger adolescents and older adolescents. Although identity formation takes place during adolescence, it was expected that some individuals will still be in the exploration phase instead of already committed to certain roles, values and goals. However, in their study, Hatano and Sugimura (2017) found that 14% of adolescents scored high on identity commitment and low on maladaptive exploration. It appears as if clear identity goals were set and explored by those adolescents. Identity exploration is continual for them, while they evaluate their identity goals by gathering information, talking to others and confirming their sense of secure identity commitment (Hatano & Sugimura, 2017). It is thus possible that some adolescents can commit to an identity status irrespective of their age and the above-mentioned study might explain the high scores on identity formation in the current study. Furthermore, the timing of physical development during adolescence is different for each individual and depends on several factors, including gender (Louw & Louw, 2014). Thus, the timing of identity formation can also differ for adolescents and may take place earlier or later in comparison with the identity formation of their peers.

According to Van Doeselaar et al. (2018), external tasks such as short-term and long-term goal setting, as well as considering possible career options, contribute to identity formation. Almost 50% of adolescents in the current study were between 17 and 19 years old. It is thus possible that some of them already committed to possible career-options, setting long-term goals and therefore scored high on identity formation in this study. According to Erikson (1968), adolescents are supposed to reach identity formation during adolescence. The high scores on identity formation in the current study thus correlate with Erikson's (1968) psychosocial theory regarding identity formation. In their study, Hatano and Sugimura (2017) classified their participants into two groups. One group maintained their current identity status over three years (stable identity trajectories), while the other group were still developing their sense of identity (transitional identity trajectories). The results indicated that adolescence might be a time for identity formation for some individuals, but not for others (Hatano & Sugimura, 2017) and might once again explain that some adolescents in this study could already have reached identity formation. Adolescence is an uncertain, transitional phase where individuals try to find a balance between independence and dependence (Szwedo et al., 2017). Considering the uncertainty of this life-stage, it is possible that some adolescents will experience in-depth exploration (Crocetti et al., 2008) regarding their current commitments in the future, although they think that they have already reached identity formation. Furthermore, Marcia (1966) stated that it is unlikely for individuals to reach identity formation before the age of 23. Considering Marcia's (1966) statement, individuals who think that they have reached identity formation, will probably recommit to a new identity in the future.

With regard to bully victimisation, participants in this study scored on the lower range of the scale. This was in contrast with the statistics of bully behaviour in schools at the time of the study (Carter, 2017). However, Hoffman, Phillips, Daigle and Turner (2017) reasoned that

bully victimisation decrease from middle school to high school and that scores regarding bullying might decrease with age. Blake et al. (2014) found that family wealth is a predictor for bully victimisation. One of the reasons why adolescents scored low in the current study, might be ascribed to the fact that the population group was part of a rural school in the Free-State, where families of participants are not affluent and therefore these learners scored in the lower ranges of bully victimisation. According to Cassidy (2009), social identity is a predictor for bully victimisation. Considering that the population group in this study scored relatively high on identity formation, it can be possible that they have a strong sense of social identity and therefore experience less bully victimisation.

Participants in this study also scored low on bully perpetration. The findings are in contrast with existing literature (De Wet, 2012). Bandura's social cognitive theory (Bandura, 1969) sets the foundation to understand bullying amongst adolescents. Adolescents observe the behaviour of peers regarding bully perpetration and eventually model and imitate this behaviour (Evans, 2014). According to Arango, Opperman, Gipson and King (2016), bully perpetration is mostly under reported, which also explains the low score on bully perpetration in this study. It is thus possible that the participants were not aware of what bully behaviour entails and see the bullying "attacks" between learners as normal behaviour or teasing. Evans (2014) found in her study that learners were not clear on what constitutes bullying, but only that it is unwanted for victims. Participants in this study might also have been in denial about their own perpetrating behaviour, or too ashamed to admit that they were perpetrators of bully behaviour. Some individuals reach formal operational thought during adolescence and the ability to think abstractly assists them with identity formation (Piaget, 1972). However, individuals who are still in the concrete operational phase, might engage more in bully behaviour (Piaget, 1972). Considering that individuals scored low on bully behaviour and high on identity formation, it

is possible that most of the adolescents in this study were thinking more abstractly. They were able to form their identities and engaged less in bully behaviour.

According to Rueger and Jenkins (2014), physical bullying, as well as psychological bullying take place in schools. However, participants in this study scored in the lower ranges of the scale regarding physical and psychological bullying. Arango et al. (2016) found in their study that learners sometimes don't see psychological bullying as a bullying category, but rather as normal behaviour and therefore, psychological bullying is sometimes under reported. James et al. (2011) also found in his study that psychological bullying amongst females is seen as normal behaviour and perpetrators are usually unaware that they are engaging in psychological bullying. On the other hand, Chapin and Brayack (2016) reasoned that psychological bullying as well as physical bullying are underreported amongst learners. It is thus possible that adolescents in this study scored low on psychological and physical bullying from the perspective of victims and perpetrators, due to the fact that they were not aware of what bullying entailed.

4.2.2 The relationship between identity formation and bully behaviour.

A significant amount of variance in bully behaviour from the perspective of the victim could be explained by identity formation. Identity formation explained 2.56% of the variance in bully victimisation and this subscale of bullying correlated positively with identity formation. According to Turner, Reynolds, Lee, Subasic and Bromhead (2014), learners with a higher social identity in schools tend to engage less in bully victimisation and bully perpetration. The above-mentioned study was in contrast with the results of the current study in terms of bully victimisation where it was found that a higher sense of identity amongst adolescence might result in more bully victimisation. Thornberg (2015) found that learners who are victims of

bully behaviour experience an identity struggle. This study is also in contrast with the findings of the current study where an increase in bully victimisation was associated with a stronger sense of identity. A negative correlation between identity formation and bully behaviour was expected, but the two constructs correlated positively with each other. A possible reason for the negative correlation might be that participants completed the identity questionnaire in a socially desirable way. Kocayörük et al. (2015) stated that the attachment styles of individuals with their parents has an influence on their identity formation. If their parents provide a secure environment for exploration, they might feel safe to explore regarding identity formation as well (Kocayörük et al., 2015). However, considering that there was a positive correlation between identity formation and bully behaviour, individuals might also explore more with risky behaviour such as bullying. Thus, a stronger identity might have led to an increase in bully behaviour. During the identity formation process, individuals decide what they want to achieve in the life and how they are planning to reach their goals (Marcia, 1966). Some individuals might consider to reach their goals by bullying others and therefore a stronger identity might once again lead to an increase in bully victimisation.

A significant amount of variance in psychological bullying from the perspective of the victim could be explained by identity formation. Identity formation explained 2.62% of psychological bully victimisation and this subscale of bullying correlated positively with identity formation. Thus, individuals with a stronger identity are more prone to become victims of psychological bullying. In contrast with the social identity theory (Tajfel & Turner, 1979), the social dominance theory (Sidanius & Pratto, 1999) stated that individuals with a high social dominance orientation desire group inequality and support existing status differences among others. It can be hypothesised that individuals with a strong identity can sometimes come across as more dominant than others. According to Goodboy, Martin and Rittenour (2016), there is a

positive correlation between social dominance orientation and psychological bullying. It can thus be hypothesised that individuals with a stronger sense of identity come across more dominant than others by expressing their options without considering the perspectives of other individuals. By being dominant in certain situations may then result in psychological bullying from other parties. Plaisier and Konijn (2013) stated that peer rejection among adolescence might lead to bully behaviour. It is thus possible that individuals with a strong sense of identity might still engage in bully behaviour due to their lack of emotional regulation.

No significant findings were found for the other relationships between bullying and identity formation. In their study, LeVasseur, Kelvin and Grosskopf (2013) could also not find a relationship between bully behaviour and identity formation. However, the current study's findings are in contrast with what Turner et al. (2014) found in terms of bully perpetration, where no significant relationship between identity formation and bully perpetration was found. A possible reason for the contrasting findings can be that the current study mostly consists of Sesotho-speaking learners (77.4%) and gives a predominant picture of the Sesotho culture and not of the population in general. Goodboy et al. (2016) stated that adolescents might be uncomfortable to admit that they are perpetrators of bully behaviour and therefore, there might be no relationship between the two constructs. Another possibility is that adolescents' engagement in bullying may depend on how they personally feel about bully behaviour. During the identity formation process, individuals may thus decide to go against their peer group's perspective of bullying or share the perspective of the peer group regarding this behaviour. Adolescents' engaged in bully behaviour can thus not be ascribed to whether they formed an identity yet, but rather to how they personally feel about bully behaviour. Therefore, there is no relationship between identity formation and bully behaviour.

In this study, it was also found that there is a strong positive relationship between being a victim and being a perpetrator of bullying. The findings of the study are similar to the findings of Sekol and Farrington (2010), who found that there was no significant correlation between perpetrator-victims of bullying and pure victims of bullying or pure perpetrators of bullying. Thus, victims of bullying become perpetrators of bullying to compensate for their pain of being a victim. According to Cook et al. (2010), there are shared predictors of bullying present in victims of bullying, perpetrators of bullying and in perpetrator-victims of bullying, namely poor social problem-solving skills. Having this characteristic can thus result in falling into one of the above-mentioned bullying subgroups. Evans (2014) found in her study that learners who were bullied in the school bus, also became perpetrators of bullying. Furthermore, it was found that this bullying category was associated with low social support. The results of the current study correlate with the findings of Cho and Lee (2018), who found that previous bully victimisation experiences led individuals to become perpetrators of bullying as well, in order to retaliate against others. The findings of the current study also correlate with the results of Balakrishnan (2018), who found that 15.2% of his sample indicated that they were perpetrator-victims. Adolescents who are different than their peer group are usually victims of bully behaviour (Thornberg, 2015). Considering the findings of the study, it may be possible that victims are uncertain about where they fit in society and seeking for a power position. They are thus compensating for their feelings of uncertainty by becoming perpetrators of bullying.

The results indicate that there is a strong positive relationship between physical and psychological forms of bullying. Dukes, Stein and Zane (2010) indicated that little attention was given in the past to the correlates of physical bullying and psychological bullying concurrently. They also found in their study that there is a significant correlation between psychological bullying and physical bullying. The above-mentioned results correlate with the

results in the current study. Thus, individuals who are victims or perpetrators of physical bullying, are also prone to be victims or perpetrators of psychological bullying.

4.2.3 The moderating role of gender.

Results indicate that gender did not moderate the relationship between identity formation and bully behaviour. Previous research suggested that gender plays a role in identity formation (Klimstra et al., 2010; Luyckx et al., 2012; Markovitch et al., 2017) and bully behaviour (Callaghan et al., 2014; Lapidot-Lefler & Dolev-Cohen, 2015; Lehman, 2014; Lucia, 2016; Thornberg & Knutsen, 2011) respectively. Therefore, it was hypothesised that gender might play a moderating role in the relationship between the two constructs. Considering that females are cognitively more mature than males (Crocetti et al., 2013), it was expected in the current study that females would reach identity formation sooner than males, while engaging less in bully behaviour. However, the finding of the current study is in contrast with the above-mentioned hypothesis. According to Klimstra et al. (2010), males have high testosterone levels during adolescence. Considering that identity formation is a challenging task, it was expected that males would deal with these challenges in a physical manner, such as being involved in bully behaviour. However, the finding of the current study indicated that gender does not moderate the relationship between identity formation and bully behaviour.

According to Williford et al. (2016), identity formation comes with several challenges and it was hypothesised in the study that males resolve these challenges through physical bullying, while females resolve these challenges through psychological bullying. However, in this study, gender did not moderate the relationship between identity formation and bully behaviour. Possible reasons for the results can include the fact that the study was done in only one school with mostly Sesotho-speaking participants. This can be described as a homogeneous group and

the results can be exceptional for this group. If the study was done in a different context and the population group consisted of a heterogeneous group, the results might have been different.

4.3 Chapter Summary

In this chapter, descriptive and inferential statistics were provided and discussed. It was emphasised that the participants in this study scored in the higher ranges of the scale for identity formation and on the lower ranges of the scale for bullying. Significant correlations between identity formation and bully victimisation, as well as identity formation and psychological bully victimisation were found. However, no significant relationships were found for identity formation and the other four bullying subscales respectively. In addition, the relationship between psychological bullying and physical bullying, as well as the relationship between victims and perpetrators, were discussed. Furthermore, gender did not moderate the relationship between identity formation and bully behaviour.

Chapter 5 – Limitations, Recommendations and Conclusion

Key findings of the research study are emphasised in this chapter. Limitations of the study, as well as recommendations and practical applications for future studies are presented.

5.1 Key Findings

The primary aim of this study was to investigate whether there is a relationship between identity formation and bully behaviour from the perspective of the victim and the perpetrator and whether gender plays a moderating role in the relationship between identity formation and bully behaviour. Some key findings regarding the current study include the relationship between perpetrators and victims of bully behaviour. Furthermore, a relationship between physical bullying and psychological bullying was also present. However, it was concluded that gender does not play a moderating role in the relationship between these two constructs, although gender influenced the two constructs respectively.

5.2 Limitations of the Study

The following limitations should be considered when interpreting the results: The study made use of a quantitative approach (Antonius, 2013) and a non-experimental type (Price, 2012). Although an advantage of the chosen approach is that it is an objective process and provides numerical data (Maree, 2011), in-depth exploration of participant's experiences (Chinyamurindi, 2012) with regard to identity formation and bully behaviour did not take place in this study. Furthermore, participants' understanding of perpetration and victimisation regarding bully behaviour could not be captured. A correlational design (Stangor, 2015) was utilised and therefore reasons why there was a relationship between identity formation and two bullying subscales, could not be provided. In this study, the research sample might also not be representative of the population and cannot be generalised to the South African population, due

to the fact that a non-probability, convenience-sampling method (Howell, 2014) was utilised. The study made use of self-report questionnaires (Lance & Vandenberg, 2009) to gather data and although questionnaires with sound psychometric properties were used, there might be a possibility that an inaccurate representation of identity formation and bully behaviour were provided. The questionnaires were also only administered in one language (English), while the home language of the majority of participants was Sesotho-speaking. Thus, misinterpretations of the questions could have taken place and could have influenced the results of the study. Furthermore, identity is also formed differently amongst different cultures. Considering that the majority of the population belonged to the Sotho culture, the results may not be an accurate representation of identity formation among adolescents in the Free State. Questionnaires could also be answered in a socially desirable way or the disciplinary style of the school could have an influence on how learners answered the questionnaires. Although it was emphasised that the questionnaires were completed anonymous, some learners could've feared that they would get in trouble if it was known that they were perpetrators of bully behaviour. Therefore, they would rather have chosen to omit this information and answer the questions in a dishonest way.

The lack of research in the field of identity formation and bully behaviour can also be seen as a limitation of the study. Previous research lays a foundation for understanding research problems that are investigated. In this study, limited previous research was available. Furthermore, the population group consisted of a homogeneous group. All the participants were part of one rural school in the Free State, belonged to a low socio-economic class, most of the participants formed part of the Sesotho-culture and all of them belonged to the same race. The fact that only one school was considered for the study can also be seen as a limitation. The learners in one school cannot be generalised to adolescents in the rest of South Africa. Slater (2016) found that identities are shaped in response to different cultural values. Considering that

77.4% of the population in the current study belonged to the Sotho culture, the results could have been affected by their cultural values and how they saw identity formation. In addition, the identity formation questionnaire used in this study, the *EIPQ* (Balisteri et al., 1995), is an older questionnaire and some of the items could be irrelevant in the 21st century. In future, a more recent psychometric measure can be considered. Regardless of the above-mentioned limitations, the study could still provide insight into how bully behaviour affects identity formation and vice versa among adolescents in the Free State.

5.3 Recommendations for Future Studies

The following recommendations can be made for future studies in the specific research field: A mixed-method approach (Howell, 2014) can be utilised to gain a better understanding regarding the identity formation of the participants, as well as how they understand and experience bully behaviour. Semi-structured interviews or focus groups (Stangor, 2015) can be conducted to get a broader idea of the participants' point of view regarding the two constructs. Probability sampling techniques (Springer, 2010) are also recommended to ensure a representative sample, which will result in generalisable data. Random sampling where learners from all grades, including different ethnic and language groups, from several schools in the province can be included in the future to give a better representation of identity formation and bully behaviour in the Free State. The questionnaires can also be translated into different languages to accommodate more language groups. A comparison between different ethnic and language groups might also result in valuable research findings, as well as a comparison with another life-stage, such as emerging adulthood.

Further recommendations include the exploration of other factors that might influence bully behaviour amongst adolescence, such as peer pressure, low self-esteem, aggressive parents,

social identity status, peer relationships and attachment styles. Identity formation can be measured in terms of exploration and commitment or in terms of the identity status paradigm (Marcia, 1966) where the results will determine how many of the sample are still in identity diffusion, foreclosure, the moratorium status, or identity achievement respectively. In future, it is recommended to not only consider identity formation in relation to bully behaviour, but to also look at aggression levels of adolescents as a moderating factor between the two constructs. Furthermore, it is recommended that different ethnic groups, various schools, more provinces and learners from all socio-economic classes need be considered in future. A more recent and detailed questionnaire to measure identity formation can also be included in future research.

In future, identity formation can be discussed in relation to a specific time period. Historic events and current circumstances have a radical effect on an individual's identity formation. Life changing events occur daily in South Africa and will have an influence on individuals' perception of "who am I" and "where am I going" which form part of identity.

5.4 Conclusion

Considering the lack of research in this specific field, research studies on identity formation and bully behaviour, as well as gender as possible moderator between the two constructs in the South African context, made a positive contribution to existing literature. Identity formation and bully behaviour during adolescence were investigated and therefore awareness was raised regarding these two constructs in the psychological field. Furthermore, the study contributes to our understanding of identity formation and bully behaviour in this development stage. In future, the study may assist in the development of appropriate prevention and treatment programmes of bully behaviour.

This study contributes to the literature in terms of adolescence, identity formation, bully behaviour and gender. In practical settings, adolescents can be assisted in identity formation and by being aware of what bully behaviour entails. In addition, schools can focus on motives why bully behaviour is a growing concern in South Africa. Furthermore, interventions can be implied to focus on identity formation during adolescence. Findings in this study can be utilised to design interventions in the school setting regarding identity formation and bully behaviour. Workshops can be designed and presented where awareness is raised about the importance of identity formation during adolescence and the influence thereof on bully behaviour in schools. The workshops can also focus on the characteristics of perpetrators, victims and perpetrator-victims of bullying respectively and the relationship among the three different groups. In addition, physical bullying and psychological bullying can be considered in the discussion and adolescents can be reminded that these behaviours should not be tolerated.

The aim of this study was to investigate whether there is a relationship between identity formation and bully behaviour from the perspective of the victim and the perpetrator and whether gender plays a moderating role in the relationship between identity formation and bully behaviour. In this chapter, key findings regarding the research questions were presented. Furthermore, limitations of the study were discussed and the chapter concluded with recommendations for future research studies. It was found in the study that a significant amount of variance in bully victimisation and psychological bully victimisation can be explained by identity formation, but gender does not moderate the relationship between the two constructs. No relationship between identity formation and the other bullying subscales was found, however, the different bullying subscales correlated significantly with each other. The study contributed to the knowledge base, as well as to practical settings in the field of psychology. Several interrelated aspects were considered regarding bully behaviour and identity formation,

including physical development, cognitive development and psychosocial development. In future, a multidisciplinary team might contribute to the results of a similar study to ensure that all the contributing factors are studied holistically and in-depth.

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Appendix A – Questionnaires

BIOGRAPHIC DETAILS

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

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

EGO IDENTITY PROCESS QUESTIONNAIRE (EIPQ)

For each of the following statements, circle the number that best describes how that statement applies to you. There are no right or wrong answers, so don't spend a lot of time on any one item. Be sure not to skip any items.

Question	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Slightly Agree	5 Agree	6 Strongly Agree
1. I have definitely decided on the occupation I want to pursue.	1	2	3	4	5	6
2. I don't expect to change my political principles and ideals.	1	2	3	4	5	6
3. I have considered adopting different kinds of religious beliefs.	1	2	3	4	5	6
4. There has never been a need to question my values.	1	2	3	4	5	6
5. I am very confident about what kinds of friends are best for me.	1	2	3	4	5	6
6. My ideas about men's and women's roles have never changed as I became older.	1	2	3	4	5	6
7. I will always vote for the same political party.	1	2	3	4	5	6
8. I have firmly held views concerning my role in my family.	1	2	3	4	5	6
9. I have engaged in several discussions concerning behaviors involved in dating relationships.	1	2	3	4	5	6
10. I have considered different political views thoughtfully.	1	2	3	4	5	6
11. I have never questioned my views concerning what kind of friend is best for me.	1	2	3	4	5	6
12. My values are likely to change in the future.	1	2	3	4	5	6
13. When I talk to people about religion, I make sure to voice my opinion.	1	2	3	4	5	6
14. I am not sure about what type of dating relationship is best for me.	1	2	3	4	5	6
15. I have not felt the need to reflect upon the importance I place on my family.	1	2	3	4	5	6
16. Regarding religion, my beliefs are likely to change in the near future.	1	2	3	4	5	6
17. I have definite views regarding the ways in which men and women should behave.	1	2	3	4	5	6
18. I have tried to learn about different occupational fields to find the best one for me.	1	2	3	4	5	6
19. I have undergone several experiences that made me change my views on men's and women's roles.	1	2	3	4	5	6
20. I have consistently re-examined many different values in order to find the ones which are best for me.	1	2	3	4	5	6

Question	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Slightly Agree	5 Agree	6 Strongly Agree
21. I think what I look for in a friend could change in the future.	1	2	3	4	5	6
22. I have questioned what kind of date is right for me.	1	2	3	4	5	6
23. I am unlikely to alter my vocational goals.	1	2	3	4	5	6
24. I have evaluated many ways in which I fit into my family structure.	1	2	3	4	5	6
25. My ideas about men's and women's roles will never change.	1	2	3	4	5	6
26. I have never questioned my political beliefs.	1	2	3	4	5	6
27. I have had many experiences that led me to review the qualities that I would like my friends to have.	1	2	3	4	5	6
28. I have discussed religious matters with a number of people who believe differently than I do.	1	2	3	4	5	6
29. I am not sure that the values I hold are right for me.	1	2	3	4	5	6
30. I have never questioned my occupational aspirations.	1	2	3	4	5	6
31. The extent to which I value my family is likely to change in the future.	1	2	3	4	5	6
32. My beliefs about dating are firmly held.	1	2	3	4	5	6

BULLYING MEASURES

Please read through the following statements and choose the most suitable option for each statement.
Please try to be as honest as possible.

<i>Last term, how often were you bullied (including cyber bullying) by one or more young people in the following ways?</i>					
Question	1 This did not happen to me	2 Once or twice	3 Every few weeks	4 About once a week	5 Several times a week
1. I was a victim of pushing and shoving	1	2	3	4	5
2. I was hit or kicked	1	2	3	4	5
3. Someone thrown something at me	1	2	3	4	5
4. I was physically threatened with hurt or harm	1	2	3	4	5
5. I was deliberately hurt physically by someone and/or by a group ganging up on me	1	2	3	4	5
6. My things were deliberately damaged, destroyed or stolen	1	2	3	4	5
7. I was teased in nasty ways	1	2	3	4	5
8. Secrets were told about me to others to hurt me	1	2	3	4	5
9. I was hurt by someone trying to break up a friendship	1	2	3	4	5
10. I was made to feel afraid by what someone said he/she would do to me	1	2	3	4	5
11. I was called names in nasty ways	1	2	3	4	5
12. Someone told me he/she wouldn't like me unless i did what he/she said	1	2	3	4	5
13. Others tried to hurt me by leaving me out of a group or not talking to me	1	2	3	4	5
14. Lies were told and/or false rumours spread about me by someone, to make my friends or others not like me	1	2	3	4	5

<i>Last term, how often did you bully (or cyber bully) another young person(s) in the following ways (on your own or in a group)?</i>					
Question	1 I did not do that	2 Once or twice	3 Every few weeks	4 About once a week	5 Several times a week
1. I was pushing and shoving others	1	2	3	4	5
2. I hit or kicked others	1	2	3	4	5
3. I throw something at others	1	2	3	4	5
4. I physically threatened others with hurt or harm	1	2	3	4	5
5. I deliberately physically hurt or ganged up on someone	1	2	3	4	5
6. I deliberately damaged, destroyed and/or stole someone's things	1	2	3	4	5
7. I teased someone in nasty ways	1	2	3	4	5
8. I told secrets about someone to others to deliberately hurt him/her	1	2	3	4	5
9. I hurt someone by trying to break up a friendship they had	1	2	3	4	5
10. I deliberately frightened or threatened someone	1	2	3	4	5
11. I called someone names in nasty ways	1	2	3	4	5
12. I told someone I would not like them unless they did what I said	1	2	3	4	5
13. I tried to hurt someone by leaving them out of a group or by not talking to them	1	2	3	4	5
14. I told lies and/or spread false rumours about someone, to make their friends or others not like them	1	2	3	4	5

Appendix B – Ethical Clearance



25 January 2016

Prof L. Naudé
Department of Psychology
UFS

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

Dear Prof Naudé

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

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

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'LJS Botes', is written over a light blue circular stamp.

Prof LJS Botes
Dean: Faculty of the Humanities

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

Appendix C – Authorisation from Department of Education

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



Professor L Naude
35 Brebner Road
Bloemfontein

Dear Professor Naude

APPROVAL TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION

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

Research Topic: Living and learning in Central South Africa.

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

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

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

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

Yours sincerely


DR JEM SEKOANYANE
CHIEF FINANCIAL OFFICER

DATE: 17/08/2015

Appendix D – Consent Letter to Principal



April / May 2016

Dear Principal

Request to conduct a research survey at your school

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

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

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

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

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

Thank you in anticipation.

Post graduate students

Prof Luzelle Naudé
Email: naudel@ufs.ac.za

Appendix E – Informed Consent

April/ May 2016

Dear Participant

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

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

You will be expected to complete a few biographic questions and some surveys.

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

Thank you

Postgraduate student

Prof Luzelle Naudé
Email: naudel@ufs.ac.za

Informed consent

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

Name and Surname: _____

Signature: _____

Date: _____



Appendix F – Turn it in Report

ORIGINALITY REPORT			
17%	12%	8%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
1	Submitted to University of the Free State Student Paper		5%
2	scholar.ufs.ac.za:8080 Internet Source		1%
3	link.springer.com Internet Source		1%
4	diginole.lib.fsu.edu Internet Source		<1%
5	ro.ecu.edu.au Internet Source		<1%
6	Williford, Anne, Aaron J. Boulton, Shandra S. Forrest-Bank, Kimberly A. Bender, William A. Dieterich, and Jeffrey M. Jenson. "The Effect of Bullying and Victimization on Cognitive Empathy Development During the Transition to Middle School", Child & Youth Care Forum, 2015. Publication		<1%
7	Darren Linvill. "The Relationship between		