

**GRATITUDE AND SUBJECTIVE WELL-BEING IN A GROUP OF
ADOLESCENTS**

by

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ABSTRACT

Satisfactory psychosocial development during adolescence will equip individuals with intrapersonal and interpersonal resources to facilitate adaptive negotiations of the complex adult world. There has been increasing empirical interest in fostering optimal development in adolescents through enhancing positive attributes and aspects of mental health. Accordingly, researchers have begun investigating the benefits of frequent experiences of gratitude, and have found that gratitude is associated with subjective well-being (SWB) among adolescents. The relationship between gratitude and SWB may be particularly important for South African youth, whose development occurs within the context of socio-political difficulties associated with transformation in the post-apartheid era, which could have a negative impact on their SWB. However, there has been no research undertaken to investigate gratitude and SWB among South African adolescents.

This study investigated the prevalence of gratitude, and the relationship between gratitude and SWB, among 812 adolescents in Gauteng. Specifically, the prevalence of state gratitude and trait gratitude were determined, and compared across female and male adolescents, and among participants from different population groups. Further, the relationship between state gratitude and SWB, and trait gratitude and SWB, was established and compared across gender and among individuals from various population groups. A quantitative non-experimental design was employed. Data was collected by self-report questionnaires assessing the prevalence of gratitude and SWB. The data was analysed by examining mean scores, conducting one-way analyses of variance (ANOVAs), as well as Pearson's product moment-correlation coefficients, and a multivariate analysis of variance and follow-up ANOVAs.

The results indicated that adolescents in this study experienced relatively high levels of gratitude. Female participants reported a higher prevalence of state gratitude and trait gratitude than male participants. The only statistically significant difference in the prevalence of gratitude among individuals from various population groups was in levels of state gratitude, with Indian adolescents reporting higher scores than White adolescents. In this study, both trait and state gratitude were related to SWB, although the relationship between trait gratitude and SWB was stronger than the relationship between state gratitude and SWB. These findings support the growing body of research that has found a relationship between gratitude and SWB in adolescents.

Key words: Adolescents, South Africa, positive psychology, subjective well-being, life satisfaction, positive affect and negative affect.



TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
ABSTRACT.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	xi
CHAPTER ONE: INTRODUCTION, PROBLEM STATEMENT, AIMS AND OVERVIEW.....	1
1 INTRODUCTION AND PROBLEM STATEMENT.....	1
2 RESEARCH AIMS.....	4
3 CHAPTER OVERVIEW.....	4
CHAPTER TWO: GRATITUDE AND SUBJECTIVE WELL-BEING IN ADOLESCENCE.....	6
1 INTRODUCTION.....	6
2 ADOLESCENCE.....	6
2.1 Definition of adolescence.....	6
2.2 Developmental tasks of adolescence.....	7
2.2.1 Formation of a personal identity.....	7
2.2.2 Renegotiating parent-adolescent relationships.....	10
2.2.3 Establishing peer relationships.....	12
2.2.4 Cognitive development.....	13
2.2.5 Development of moral reasoning.....	14
2.3 Conclusion.....	15
3 GRATITUDE.....	15
3.1 Definition of gratitude.....	16
3.1.1 Trait gratitude.....	16

3.1.2	State gratitude	17
3.1.3	Interaction of trait and state gratitude	18
3.2	Development of gratitude	19
3.3	Correlates of gratitude in adolescence.....	24
3.4	Gratitude and the development of personal resources.....	26
3.5	Gratitude and gender	27
3.6	Gratitude among various population groups	29
3.7	Conclusion.....	31
4	SUBJECTIVE WELL-BEING	32
4.1	Defining subjective well-being	32
4.1.1	Hedonic versus eudaimonic perspectives on well-being	32
4.1.2	Subjective well-being as defined in this study.....	34
4.2	Correlates of subjective well-being in adolescence	37
4.2.1	Correlates of global life satisfaction	37
4.2.2	Correlates of domain-specific life satisfaction.....	38
4.2.3	Correlates of positive affect	45
4.3	Determinants of subjective well-being.....	47
4.3.1	Genetic influences.....	48
4.3.2	Life circumstances	48
4.3.3	Intentional activities.....	49
4.4	Conclusion.....	51
5	ADOLESCENTS, GRATITUDE AND SUBJECTIVE WELL-BEING.....	52
5.1	Gratitude and subjective well-being in adolescence	52
5.1.1	Gratitude and life satisfaction in adolescence.....	52
5.1.2	Gratitude and affective states in adolescence	53
5.2	Conclusion.....	55
6	CONCLUDING SUMMARY	55

CHAPTER THREE: RESEARCH METHOD	57
1 INTRODUCTION.....	57
2 RESEARCH AIMS	57
3 RESEARCH DESIGN.....	57
4 PARTICIPANTS.....	58
5 PROCEDURE	59
6 MEASURING INSTRUMENTS	60
6.1 Biographical questionnaire.....	60
6.2 The Gratitude Adjective Checklist (GAC) (McCullough et al., 2002)	60
6.2.1 Rationale	60
6.2.2 Nature and administration.....	60
6.2.3 Scoring and interpretation.....	61
6.2.4 Reliability and validity.....	61
6.2.5 Motivation for use.....	61
6.3 The Gratitude Questionnaire-Six-Item Form (GQ-6) (McCullough et al., 2002).....	62
6.3.1 Rationale	62
6.3.2 Nature and administration.....	62
6.3.3 Scoring and interpretation.....	62
6.3.4 Reliability and validity.....	62
6.3.5 Motivation for use.....	63
6.4 The Satisfaction with Life Scale (SWLS) (Diener et al., 1985).....	63
6.4.1 Rationale	63
6.4.2 Nature and administration.....	64
6.4.3 Scoring and interpretation.....	64
6.4.4 Reliability and validity.....	64
6.4.5 Motivation for use.....	65

6.5	The Multidimensional Student's Life Satisfaction scale (MSLSS) (Huebner, 1994).....	65
6.5.1	Rationale	65
6.5.2	Nature and administration.....	65
6.5.3	Scoring and interpretation.....	65
6.5.4	Reliability and validity.....	66
6.5.5	Motivation for use.....	67
6.6	Affectometer 2 (Short Form) (AFM) (Kammann & Flett, 1983).....	67
6.6.1	Rationale	67
6.6.2	Nature and administration.....	68
6.6.3	Scoring and interpretation.....	68
6.6.4	Reliability and validity.....	68
6.6.5	Motivation for use.....	69
7	ETHICAL CONSIDERATIONS	69
8	DATA ANALYSIS	70
9	CONCLUDING SUMMARY	70
CHAPTER FOUR: RESULTS		71
1	INTRODUCTION.....	71
2	DESCRIPTIVE STATISTICS	71
3	RELIABILITY INDICES	72
4	THE PREVALENCE OF GRATITUDE AMONG FEMALE AND MALE ADOLESCENTS.....	73
5	THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS.....	74
6	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS	76
7	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING ACROSS GENDER AMONG ADOLESCENTS.....	78

8	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS	78
9	CONCLUDING SUMMARY	79

CHAPTER FIVE: DISCUSSION OF RESULTS, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH.....80

1	INTRODUCTION.....	80
2	THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS.....	80
3	THE PREVALENCE OF GRATITUDE AMONG FEMALE AND MALE ADOLESCENTS.....	83
4	THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS.....	86
5	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS	89
6	GRATITUDE AND LIFE SATISFACTION AMONG ADOLESCENTS	89
	6.1 Gratitude and global life satisfaction.....	90
	6.2 Gratitude and domain-specific life satisfaction.....	91
7	GRATITUDE AND AFFECTIVE STATES AMONG ADOLESCENTS.....	94
	7.1 Gratitude and positive affect	94
	7.2 Gratitude and negative affect	96
8	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING ACROSS GENDER AMONG ADOLESCENTS.....	99
9	THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS	102
10	LIMITATIONS OF THE STUDY	104
11	RECOMMENDATIONS FOR FUTURE RESEARCH	105
12	CONCLUDING SUMMARY	107

REFERENCES 109

APPENDIX 1: Approval from the Gauteng Department of Education in respect of request
to conduct research 135

APPENDIX 2: Parental information letter and consent form..... 137



LIST OF TABLES

Table 4.1: Descriptive statistics for all measures.....	72
Table 4.2: Reliability coefficients for all measures	73
Table 4.3: Mean scores and standard deviations for female and male participants on the GAC and GQ-6.....	74
Table 4.4: Mean scores and standard deviations obtained by participants from four population groups on the GAC and GQ6.....	75
Table 4.5: Correlation matrix for the GAC, GQ-6 and measures of SWB.....	76
Table 4.6: Results from the follow-up ANOVAs for the effect of GAC and GQ-6 on SWB .	78



CHAPTER ONE: INTRODUCTION, PROBLEM STATEMENT, AIMS AND OVERVIEW

1 INTRODUCTION AND PROBLEM STATEMENT

Adolescence is a period of rapid psychosocial maturation which may be challenging and evoke maladaptive behaviours, but it also presents opportunities for considerable positive growth and developmental achievements (Erickson, 1963). Optimal psychological development during adolescence is important as it contributes to an adaptive transition into adulthood (Bono & Froh, 2009). This study aims to identify aspects of psychological functioning which may facilitate positive functioning and change during adolescence.

Psychology has traditionally focused on understanding and alleviating mental illness. However, researchers from the recently developed field of positive psychology have argued that enhancing adaptive aspects of functioning is an important part of mental health (Simonton & Baumeister, 2005). One area within the field of positive psychology that has increasingly been the focus of empirical investigation is the relationship between gratitude and subjective well-being (SWB). Recent research has found support for a relationship between gratitude and SWB among adolescents (Froh, Sefick & Emmons, 2008; Froh, Yurkewicz & Kashdan, 2009). Furthermore, interventions aimed at fostering gratitude among youths seem to be effective in increasing SWB (Froh et al., 2008).

Briefly stated, gratitude may be defined as feelings of appreciation that are evoked through the recognition of positive influences in the environment (Emmons, 2009). Frequent feelings of gratitude have been associated with numerous aspects of adaptive functioning during adolescence, such as establishing satisfying social relationships (Froh, Yurkewicz, et al., 2009), the pursuit of intrinsically rewarding goals as opposed to materialistic attainments

(Froh, Emmons, Card, Bono & Wilson, 2011), and increased frequency of positive affective experiences (Froh, Yurkewicz, et al., 2009) which, in turn, may be a catalyst for the development of personal resources (Fredrickson, 1998, 2001). Therefore, gratitude in itself appears to be valuable in facilitating positive developmental outcomes in adolescents. The benefits of gratitude may, however, be underscored through the association between gratitude and SWB.

SWB refers to positive subjective evaluations of life satisfaction and an abundance of positive versus negative affect (Diener, Suh, Lucas & Smith, 1999). Researchers have emphasised the importance of SWB during adolescence by identifying correlates of SWB. For example, adolescents with high levels of SWB, in comparison to those with low levels of SWB, exhibit superior performance at school, enhanced social competence, and higher self-esteem (Gilman & Huebner, 2006), thus suggesting that SWB is important to mental health and optimal functioning. Furthermore, SWB has an inverse relationship with depression and anxiety (Gilman & Huebner, 2006) and delinquent externalising behaviours (Valois, Zullig, Huebner & Drane, 2001; Zullig, Valois, Huebner, Oeltmann & Drane, 2001), all of which may compromise satisfactory development during adolescence. Therefore, SWB appears to be valuable in fostering positive change among adolescents. As such, the relationship between gratitude and SWB seems to be important during adolescence, particularly in view of the finding that interventions aimed at enhancing gratitude appear to be effective in enhancing SWB (Froh et al., 2008).

Gratitude, and the benefits that gratitude confers to SWB, may be particularly important for youth in South Africa who are grappling with psychosocial developmental tasks as well environmental difficulties associated with transformation in the post-apartheid era, such as poverty-related stressors and high rates of crime and violence. Environmental adversity may

have a negative impact on perceptions of positive influences in the external world and SWB. Existing research regarding gratitude and SWB in adolescents has mainly been conducted in the USA and there is currently no research pertaining to gratitude and SWB among the South African population. Research among adolescents in South Africa is required to determine the prevalence of gratitude, and the relationship between gratitude and SWB across the youth in the South African context. Such information may be useful in determining the need for interventions that enhance gratitude and SWB among South African adolescents.

Perceptions of gratitude may, however, vary among different groups of individuals within the same geographical area. Differences in perceptions of gratitude may influence the experience and expression of gratitude, and thereby impact on the benefits that gratitude confers to SWB (Kashdan, Mishra, Breen & Froh, 2009). These authors therefore argued for the necessity of investigating differences in gratitude across various groups of individuals. This information may indicate whether there is a need to identify variables that compromise frequent feelings of gratitude and the relationship between gratitude and SWB among certain individuals. Researchers have begun investigating differences in gratitude across gender among adults (Kashdan et al., 2009) and early adolescents (Froh, Yurkewicz, et al., 2009), and have found some evidence that females experience a greater extent of gratitude than males. However, further research is required to understand whether there are gender differences in the prevalence of gratitude and in the relationship between gratitude and SWB across different stages of adolescence.

Similarly, Bono, Emmons and McCullough (2004) emphasised the need to determine whether there are differences in the expression and experience of gratitude among individuals from various population groups, because diverse cultural values may lead to variations in perceptions of gratitude-inducing events. Investigating differences in gratitude and SWB

across members of various population groups may be particularly important in the South African context because of the cultural diversity of the population. Such information may be important in designing and planning interventions to enhance gratitude that are sensitive to different cultural values pertaining to gratitude.

Against this backdrop, the broad aim of this study is to investigate the prevalence of gratitude, and the relationship between gratitude and SWB among adolescents in Gauteng.

2 RESEARCH AIMS

In accordance with the problem statement outlined in the previous section, the specific research aims are as follows:

1. To determine the prevalence of gratitude among adolescents.
2. To determine and compare the prevalence of gratitude among female and male adolescents.
3. To determine and compare the prevalence of gratitude among adolescents from different population groups.
4. To establish the relationship between gratitude and SWB among adolescents.
5. To establish whether the relationship between gratitude and SWB varies across gender among adolescents.
6. To establish whether the relationship between gratitude and SWB varies among adolescents from different population groups.

3 CHAPTER OVERVIEW

Having described the problem statement and aims of this study, this section provides an overview of the ensuing chapters of the research report. Chapter two presents a review of

literature concerning adolescents, gratitude, subjective well-being (SWB), and research findings regarding gratitude and SWB among adolescents.

Chapter three describes the research methods employed to achieve the research aims. Details of the data collection, ethical considerations and statistical techniques used to analyse the data are provided.

Chapter four comprises the results of the statistical techniques. Firstly, the descriptive statistics and reliability indices are described, following which the results are presented in accordance with the research aims.

Chapter five discusses the results of the findings in the context of existing literature, describes the limitations of the study and presents recommendations for further research.



CHAPTER TWO: GRATITUDE AND SUBJECTIVE WELL-BEING IN ADOLESCENCE

1 INTRODUCTION

Adolescence is associated with a unique combination of psychosocial developmental tasks, the outcome of which may have a decisive influence on the individual's functioning in adulthood. Although adolescence has been described as a difficult and stressful period, it also presents opportunities for growth (Erikson, 1963). This study, informed by the paradigm of positive psychology, is concerned with optimal development during adolescence, specifically as it relates to the experience of gratitude and subjective well-being (SWB). This chapter provides a review of literature concerning the relationship between gratitude and SWB in adolescents. Adolescence, gratitude, and SWB are discussed separately, following which research findings regarding gratitude and SWB among adolescents are presented.

2 ADOLESCENCE

2.1 Definition of adolescence

Adolescence refers to the period of development between childhood and adulthood during which the individual prepares to enter the adult world. The beginning of adolescence is typically defined by the onset of puberty (Smetana, Campione-Barr & Metzger, 2006). Researchers tend to group adolescence into three developmental stages: early adolescence (10 to 12 years of age), middle adolescence (13 to 16 year of age), and late adolescence (17 to the early twenties) (Laursen, Coy & Collins, 1998). The end of adolescence is, however, difficult to define. Chronological age and sociological milestones, for example entering the employment sector and starting a family, have been considered as indicators of adulthood (Smetana et al., 2006). However, chronological age may not be an accurate definition of the

end of adolescence, due to individual differences in development (Hazen, Scholzman and Beresin, 2008). Sociological milestones may also be inappropriate indicators of adulthood, as different cultures may have different expectations regarding adolescent development (Hazen et al., 2008). For example, both White Americans and Americans from ethnic minority groups appear to recognise financial independence as a marker of adulthood. However, Americans from ethnic minority groups tend to place more importance on the fulfilment of interpersonal obligations as an indication of emerging adulthood than White Americans (Arnett, 2003). It has, therefore, been suggested that the transition from adolescence to adulthood may be most accurately defined in terms of the accomplishment of developmental milestones, for example, the formation of a personal identity (Hazen et al., 2008), as will be outlined below.

2.2 Developmental tasks of adolescence

2.2.1 Formation of a personal identity

One of the most important developmental tasks in preparation for the adult world is the formation of a coherent personal identity (Hazen et al., 2008). Erikson's (1963) theory of psychosocial stages of development has been influential in understanding identity formation during adolescence. Erikson (1963) advanced individual development as occurring in a linear sequence of eight stages of development. Each stage involves the interaction between a psychological developmental task and the influences of the social, cultural and ideological realities within which the individual is located. Personal development and socio-historical influences are reciprocally linked and cannot be understood in isolation of each other (Erikson, 1968/1971). Successful resolution of a developmental stage equips the individual with a specific internal resource to be integrated into his developing ego strength from which

to negotiate the world. Unsuccessful resolution results in a deficit of ego strength in that area (Hook, 2002).

The developmental challenge of adolescence is the formation of a personal identity (Erikson, 1963). This involves the psychological task of integrating all childhood identifications, competencies and interests into a stable and coherent self-identity. The corresponding social task involves creating a self-image and defining social roles that are compatible with personal values, as well as societal norms and values (Erikson, 1963). Erikson (1968/1971) maintained that adolescence is a period of “psychosocial moratorium”, during which society allows the adolescent time to experiment with different configurations of identity while being free from the responsibilities of adulthood. The successful resolution of the psychosocial moratorium entails the development of a stable identity and the ego strength of “fidelity”, which enables commitment to occupational and social roles, peer groups, specific ideologies, and the psychological resources required to make decisions in the adult world (Maier, 1969). Although most adolescents do resolve the moratorium period successfully, such resolution may be hindered if the individual is unable to integrate the various polarities of the self and their value systems into a coherent personal identity, which leads to “role confusion” (Erikson, 1963). The state of not having a secure identity may be overcome by over-identifying with a role model, or taking on a negative identity that opposes the dominant social norms and values. Alternatively, the successful resolution of the psychosocial moratorium may be thwarted by early foreclosure if the individual commits to an identity without sufficient exploration of the available options (Maier, 1969).

More recent researchers have applied the ideas of Erikson (1963, 1968/1971) regarding the development of a personal identity to the South African context. Stevens and Lockhat (1997) suggested that Erikson’s focus on the relationship between the individual and society is

particularly appropriate for describing the process of identity formation among Black adolescents in South Africa as it encourages an analysis of the effects of the socio-political system on identity development. The authors were concerned that the socio-political influences of the post-apartheid era may pose challenges to the identity formation of Black South African adolescents. During apartheid, many Black South African adolescents defined themselves as political activists and rejected the value system of the culture that oppressed them. A shared social identity among Black adolescents was constructed in relation to mutual political objectives. However, in the post-apartheid era, Western ideologies, for example individualism, have gained support and are exerting a pervasive influence in the daily lives of most South Africans. In attempting to negotiate the challenges of the social world, many Black adolescents are embracing societal norms and values that oppose their own cultural value system. If Black adolescents reject their own culture, feelings of isolation from families and communities may occur, but attempting to integrate conflicting ideologies within a single identity may result in role confusion (Stevens & Lockhat, 1997). In seeking to promote optimal development among South African adolescents, it is necessary to understand challenges that may be unique to the South African context.

Establishing a sense of identity during adolescence may also involve aspects related to gender identity. At birth, individuals have a biological sex which is determined on the basis of their physical characteristics. Gender describes traits and behaviours that culture regards as appropriate for the different sexes. Thus, gender is a social label that refers to patterns of behaviour associated with sex differences (Brannon, 2008). The development of gender-specific roles and identities has been posited to intensify during adolescence as a result of socialisation practices (Hill & Lynch, 1983). More recent researchers have, however, argued that gender differences in adolescence may be overstated, particularly regarding masculine traits in mid-adolescence (Priess, Lindberg & Hyde, 2009). The authors speculated that

females may increasingly be encouraged to develop masculine traits in order to equip them with the attributes required to succeed in a capitalist economy. Thus, there may be less differentiation of gender roles in contemporary societies as compared to observations previously made. Accordingly, this study will investigate whether there are gender differences in the prevalence of gratitude during adolescence.

2.2.2 Renegotiating parent-adolescent relationships

Adolescents are faced with the task of becoming independent of their parents. This entails two interrelated processes: achieving psychological separation from the parents, and the restructuring the parent-adolescent relationship towards a more equal distribution of power and authority (Seifert & Hoffnung, 2000). Psychological separation involves relinquishing the image of the parents that prevailed during childhood, in which the parents were a continual source of authority, and emotional and self-esteem regulation (Blos, 1967). In optimal development, the parents come to be recognised as independent individuals with their own aspirations and limitations, and the adolescent gradually takes increasing responsibility for his own self-regulation while still remaining connected to the parents (Youniss & Smollar, 1985). Psychological separation from the parents is an essential task of adolescence as continued dependence on childhood images of the parents will hinder the development of age-appropriate relationships. At an unconscious level, separation from the parents could be a painful process that the adolescent may attempt to postpone through overt conflict with the parents, which obscures internal delays in the process of separation. However, if such developmental delays are temporary, the parent-child conflict could become a useful transitory vehicle for disrupting childhood dependencies, thereby facilitating separation from the parents (Blos, 1967).

As adolescents develop an increasing capacity for autonomy, they typically seek to restructure the unilateral parental authority, characteristic of the parent-child relationship, towards a more equal and cooperative relationship (Seifert & Hoffnung, 2000; Youniss & Smollar, 1985). Some parent-adolescent conflict appears to be a normative process in the development of a more egalitarian parent-adolescent relationship, because the balance of power between the parent and adolescent is realigned during conflict resolution (Collins, Laursen, Mortensen, Luebker, Ferreira, 1997). However, excessive parent-adolescent conflict may lead to a deteriorating relationship. Poor quality parent-adolescent relationships have been associated with delinquent behaviour and reduced well-being during adolescence (Hair, Moore, Garrett, Ling & Cleveland, 2008; Parker & Benson, 2004). Literature has emphasised the role of authoritative parenting (characterised by firm and clear boundaries, warmth and open communication) in promoting positive adolescent development and parent-adolescent relationships (Kail, & Cavanaugh, 2007; Seifert & Hoffnung, 2000). Some researchers have, however, underscored the reciprocal nature of the parent-adolescent relationship whereby the behaviour of both parties influences the nature of their relationship (Caprara, Pastorelli, Regalia, Scabini, & Bandura, 2005; Stierlin, 1981). This may imply that adolescents also have a responsibility in restructuring the parent-adolescent relationship. As adolescents' cognitive capacities mature, they become increasingly aware of different perspectives (see paragraphs 2.2.4 and 2.2.5). These developing cognitive processes may be applied to engage in constructive styles of conflict resolution, for example, negotiation as opposed to resorting to aggression and withdrawal, in order to facilitate the restructuring of the parent-adolescent relationship (Sandy & Cochran 2000; Van Doorn, Branje, Wim & Meeus, 2011). Thus, adolescents' drive for autonomy necessitates their taking some responsibility for their influence on the relationship with their parents. As this study is concerned with positive adolescent development, it is important to consider adolescents' role in fostering constructive

changes in their relationships with their parents, which may ultimately impact on their well-being.

2.2.3 Establishing peer relationships

As adolescents move away from dependency on family members, they are faced with the challenge of interacting in an increasingly complex social world. Although adolescents often maintain dyadic relationships and clique memberships that were established in childhood, new friendships are formed and affiliations are made with a greater number of social groups (Brown & Klute, 2003). Peer relationships typically become a priority for adolescents and these relationships fulfil some of the functions that were previously satisfied by the family, such as offering a sense of belonging and support, and providing feedback on experimentation with self-expression (Maier, 1969).

The desire to be part of a friendship or group may, however, challenge the adolescent's growing autonomy and sense of self (Hook, 2002). Adolescent peer groups often exert pressure to conform to the group norms and identity (Seifert & Hoffnung, 2000), and in seeking peer acceptance, the adolescent may over-identify with the group identity to the detriment of his own developmental path (Hook, 2002). On the other hand, failure to find acceptance within peer groups may lead to social withdrawal and adjustment difficulties (Hook, 2002). Therefore, the challenge for adolescents appears to involve finding a balance between establishing supportive friendships whilst maintaining an independent sense of self. Thus, promoting positive functioning during adolescence necessitates the consideration of attributes required to establish constructive patterns of engaging with peers.

2.2.4 Cognitive development

According to Piaget (1952, as cited in Cockcroft, 2002), cognitive processes evolve in order for the individual to adapt to the environment. During late childhood, information processing is limited to understanding the properties of concrete objects and relationships between concrete objects based on logical inferences. As the adolescent's environment becomes more elaborate and complex, negotiation of the environment requires more sophisticated cognitive processes. The capacity for abstract thought typically begins to emerge during adolescence; thinking is no longer limited to concrete objects or the present (Cockcroft, 2002). With increasing competence in manipulating symbolic information, the adolescent may begin to consider theoretical concepts, envision future possibilities and engage in analysis of his own thought process. Hypotheses, alternative solutions and their outcomes may be evaluated mentally before actually attempting the task, which was not possible in the earlier stages when thinking was restricted to the immediate and material. This new dimension provides the adolescent with a methodical approach to problem-solving (Cockcroft, 2002).

Advances in cognitive development extend to social relationships, with adolescents developing the capacity to move from their own social reality to consider the social reality of others (Maier, 1969). The concepts of fairness and justice are reflected on from different perspectives in relative rather than absolute terms (Maier, 1969). The adolescent may also begin to contemplate complex concepts such as religion and social values, and start constructing his own ideological beliefs (Maier, 1969). This increased capacity for more complex reasoning is important to consider in exploring facets of positive functioning, such as overall life satisfaction and domain-specific life satisfactions, as these are based on cognitive judgments.

2.2.5 Development of moral reasoning

Kohlberg (1981) maintained that moral reasoning develops when cognitive processes are applied to solve social problems. The level of cognitive development that has been achieved informs the solution that is deemed appropriate for the social problem. However, cognitive development does not inevitably promote the development of moral reasoning. Moral reasoning evolves when the individual is confronted with social problems that challenge his existing notions of right and wrong (Grant, 2002). During childhood, or the “pre-conventional stage” of moral development, the solutions to moral dilemmas are derived from rules established by authority figures. Rules are absolute and the motivation to apply the rules is to avoid negative consequences of non-compliance or to realise a reward (Kohlberg, 1981). During adolescence, the emerging capacity for empathy and the increasing complexity of the individual’s social networks typically stimulate a transition to the “conventional stage” of moral development (Grant, 2002). In the conventional stage, morality is motivated by a concern for interpersonal obligations. Moral reasoning is applied in order to be perceived as caring and empathic by significant others. The concern for significant others tends to expand to incorporate concern for social institutions and society at large. Consequently, moral rules are informed by social norms and interpersonal obligations (Kohlberg, 1981). Thus optimal development during adolescence requires the adolescent to apply complex reasoning skills to solve moral dilemmas in accordance with social values. This is an additional aspect of development that needs to be considered in exploring adolescent functioning, specifically as it relates to gratitude, which has been conceptualised as an emotion that promotes prosocial behaviour (see paragraph 3.1.2).

2.3 Conclusion

Adolescence is associated with numerous psychosocial developmental tasks, such as the formation of a personal identity and the renegotiation of age-appropriate relationships. The resolution of developmental tasks in adolescence has a decisive influence on functioning in adult life. It is therefore important to ensure that adolescents are equipped with the psychological resources that are required to successfully resolve the developmental challenges encountered during adolescent years. Research findings have suggested that gratitude is a psychological strength which may foster positive developmental outcomes in adolescents (Froh, Emmons, et al., 2011; Froh et al., 2008; Froh, Yurkewicz, et al., 2009). The following section provides a review of literature regarding gratitude.

3 GRATITUDE

Psychology has traditionally been interested in understanding and treating psychopathology. This is essential in reducing human suffering; however, an absence of symptoms is not synonymous with mental health and well-being (Keyes, 2007). Interest in the more positive aspects of psychological functioning is one of the foci of the recently developed field of positive psychology. In seeking to supplement existing psychological research and practices by focusing on processes that promote mental health, positive psychology is specifically concerned with identifying the role of human strengths in fostering well-being (Peterson & Seligman, 2004). One such strength is gratitude, which has been associated with subjective well-being (SWB) (Emmons & McCullough, 2003). This section begins with a definition of gratitude and a discussion of the developmental trajectory of gratitude. The correlates of gratitude and the role of gratitude in facilitating the development of personal resources are described. Finally, differences in gratitude across gender and among members of various population groups are considered.

3.1 Definition of gratitude

Gratitude may be defined as feelings of thankfulness and appreciation that are evoked through the recognition that a personal benefit has been obtained through the intentional and benevolent actions of a source external to the self. Feeling grateful involves acknowledging and appreciating those personal benefits that could not have been achieved without assistance from external sources (Emmons, 2009). The external source is often another individual, but may also be any non-human source, such as being grateful to God, nature, or an animal (Emmons, 2007).

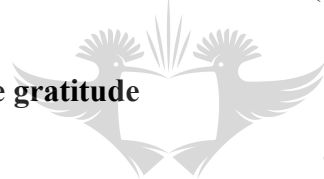
Gratitude has been defined as both an affective trait (McCullough, Emmons & Tsang, 2002) and an affective state (McCullough, Emmons & Tsang, 2004; McCullough, Kilpatrick, Emmons & Larson, 2001). Affective traits are pervasive and enduring individual differences in the tendency towards particular emotional responses, while affective states are transient responses to environmental events (Rosenberg, 1998). This study will investigate both trait and state gratitude.

3.1.1 Trait gratitude

The affective trait of gratitude, or a “grateful disposition”, creates a tendency towards recognising and reciprocating generosity in personal positive outcomes (McCullough et al., 2002, p. 113). Although affective traits are typically not accessible to conscious awareness, they have a pervasive influence on information processing through their role in organising, or eliciting, affective states (Rosenberg, 1998). McCullough et al. (2002) stated that a grateful disposition is comprised of four interdependent facets. Individuals with high levels of trait gratitude, as compared to individuals with low levels of trait gratitude, tend to experience gratitude more often (frequency), experience gratitude as a powerful state (intensity), are more sensitive to recognising life experiences which evoke gratitude (span), and recognise a

greater number of individuals who may have contributed to their personal achievements (density). Wood, Froh and Geraghty (2010) argued that definitions of trait gratitude have been too narrow in focusing on the receipt of interpersonal aid. Earlier, Wood, Maltby, Stewart and Joseph (2008, p. 16) compared three psychometric instruments designed to measure trait gratitude according to different conceptualisations of gratitude. The findings suggested that trait gratitude is a higher order construct which encompasses at least eight lower order facets as diverse as “frequent feelings of awe” and “appreciation arising from understanding that nothing is permanent”. Wood et al. (2010, p. 891), therefore, defined trait gratitude as an “orientation towards noticing and appreciating the positive in the world”. The authors maintained that this definition of trait gratitude is appropriate in capturing all the social and non-social sources of gratitude. In this study, trait gratitude will be measured by the Gratitude Questionnaire-Six-Item Form (GQ-6) (McCullough et al., 2002).

3.1.2 State gratitude



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Affective states, in comparison to affective traits, are more accessible to conscious awareness. However, they have a less pervasive effect on information processing, because of their short duration (Rosenberg, 1998). Affective states comprise emotions and moods. Emotions are involuntary reactions to environmental events that subside within minutes to hours (Rosenberg, 1988). The emotion of gratitude is experienced when help is received that is perceived to be valuable, intentionally provided, and provided at some cost or sacrifice to the benefactor (McCullough et al., 2001). Emotions stimulate adaptive responses to the environment, following which the emotions subside (Rosenberg, 1998). Gratitude as an emotion has been associated with the adaptive response of promoting reciprocal benevolent behaviours (Bartlett & DeSteno, 2006; McCullough et al., 2002).

Moods are influenced by affective traits as well as environmental events (Rosenberg, 1998). Moods are more stable than emotions, typically lasting from hours to days and, therefore, have a more enduring influence on thoughts and behaviours than emotions (Rosenberg, 1998). A grateful mood is argued to create enduring positive processes, for example, recognising constructive influences during times of adversity (McCullough et al., 2004). Researchers interested in state gratitude have tended to focus on gratitude as a mood (Emmons & McCullough, 2003; Froh et al., 2008; Froh, Yurkewicz, et al., 2009), as will be the case in this study. State gratitude, in this study, will be measured by the Gratitude Adjective Checklist (GAC) (McCullough et al., 2002).

3.1.3 Interaction of trait and state gratitude

Although trait and state gratitude were discussed separately, measures of trait gratitude are positively correlated with measures of state gratitude (McCullough et al., 2004; Wood, Maltby, Stewart, Linley & Joseph, 2009). There is debate in the literature with regard to the mechanisms by which trait and state gratitude interact, and the impact of daily events in inducing mood gratitude. McCullough et al. (2004) reported that daily gratitude-inducing events did not appear to have much influence on mood gratitude in individuals with high levels of trait gratitude. The authors suggested that high levels of trait gratitude are so influential in establishing the level of gratitude in daily moods, to the extent that environmental events have limited influence on mood gratitude in individuals with a grateful disposition. The reverse tended to be true for individuals with low levels of trait gratitude.

More recently, a social-cognitive model has been advanced which maintains that the beneficiary's attributions regarding the nature of the gratitude-inducing event, or the individual's "benefit appraisal", causes state gratitude (Wood, Maltby, Stewart, Linley, et al., 2008). The benefit appraisal is informed by situational factors and trait gratitude. Individuals

with higher levels of trait gratitude, as compared to individuals with lower levels of trait gratitude, tend to make more positive attributions regarding the value of the aid received, the cost of the actions to the benefactor and the extent to which the benefactor's intentions were altruistic, and therefore experience more state gratitude (Wood, Maltby, Stewart, Linley, et al., 2008). Thus, levels of trait gratitude appear to play an important role in the extent to which state gratitude is experienced.

3.2 Development of gratitude

There are numerous theories regarding the developmental trajectory of gratitude; however, empirical investigation in this area is limited. This section will offer explanations of the development of gratitude according to the views of Baumgarten-Tramer (1938), Klein (1957), McAdams and Bauer (2004), and Graham (1988).

Baumgarten-Tramer (1938) conducted a landmark study in attempting to elicit developmental differences in the manifestation of gratitude in 1,059 children between the age of 7 and 15 years. Participants were asked to respond to two questions, "What is your greatest wish?" and "What would you do for the person who granted you this wish?" Four qualitatively different types of gratitude were reported.

"Verbal gratefulness", or saying thank-you, occurred in 30 – 48% of responses and was expressed across all age groups, although it was most common in children of 15 years of age (72% of responses). Baumgarten-Tramer (1938) proposed three situations in which verbal gratitude may be used: young children say thank-you because they have been taught to do so, even though they may not necessarily experience gratitude; the hasty use of words expressing thanks may imply ingratitude, or the words "thank-you" may be used by an individual who is overwhelmed by feelings of gratitude but is unable to find his individual way of expressing his feelings. The latter was argued to be most common in early adolescence.

“Concrete gratefulness” involved the child repaying the benefactor for the gift received. Concrete gratefulness was divided into “exchange gratitude” and “material gratitude”. Exchange gratitude was reflected in the child giving the benefactor a gift that the child believed to be valuable, for example, his favourite toy. Material gratitude occurred when the child offered the benefactor some benefit from the gift he bestowed on the child, for example, the request for a gift of a car may be reciprocated by the promise of free transport. Concrete gratitude indicates egocentric thinking by the child, because he assumes that the benefactor desires the same objects as he desires. Baumgarten-Tramer (1938) did not provide information regarding the age group most likely to express exchange gratitude. Material gratitude occurred most commonly in children aged 8 (51%), and least frequently in those between 12 and 15 years of age (6%).

“Connective gratefulness” described the beneficiary’s desire to express gratitude by creating a relationship with the benefactor, in which the beneficiary would be available to assist the benefactor in the future. Baumgarten-Tramer (1938) posited connective gratitude as being superior to verbal or concrete gratitude, because the child is less egocentric and takes cognisance of the beneficiary’s needs. Connective gratitude increased from age 11 and was most frequent in children of 12 years of age (60%).

“Finalistic gratefulness” represented the beneficiary’s attempt to thank the benefactor by undertaking to act in manner that benefited the benefactor, or benefited the desired situation, or promised personal skill development. For example, a girl who wished to get a job promised to comply with the organisation’s requirements and perform her tasks with enthusiasm and integrity. Finalistic gratefulness was most common in adolescents between the ages of 13 and 15 years (Baumgarten-Tramer, 1938). Although these findings have yet to be subject to empirical investigation, the study remains influential as it provides the only

theory of the stages of development of gratitude (Bono & Froh, 2009; Froh, Miller & Snyder, 2007).

Klein (1957) advanced a psychodynamic conceptualisation of the development of gratitude. She maintained that the capacity for gratitude originates in early infancy in the context of the relationship between the infant and his first part object, typically his mother's breasts. The infant introjects and internalises his early objects, which form the basis of unconscious life and determine the manner in which the infant understands and responds to the external world. The concept of the internalised good breast is not limited to experiences in nurturing, but rather becomes a symbol for all that is invested with the life drive. According to Klein (1957, p. 179), "We find in the analysis of our patients that the breast in its good aspect is the prototype of maternal goodness, inexhaustible patience and generosity, as well as of creativeness". The author further posited an association between love, enjoyment, and gratitude. The more an infant is capable of love, the more he can enjoy nurturing interactions with the mother. Enjoyment is the foundation of gratitude as the infant values the gift from his mother that he enjoys, and seeks to cherish and return the gift. Gratitude facilitates internalisation of good objects, promotes awareness of the self and others as valued objects, and is therefore fundamental for positive patterns of relating and feelings of togetherness. Repeated experiences of gratitude, of receiving and giving, increases the infant's belief in the benevolence of his internal objects and the external world. Klein (1957, p. 186) stated, "One major derivative of the capacity for love is the feeling of gratitude. Gratitude is essential in building up the relation to the good object and underlies also the appreciation of goodness in others and in oneself".

The development of gratitude may, however, be hindered by excessive frustration at the breast which evokes envy (Klein, 1957). The envious infant, in phantasy, believes the breast

deliberately withholds gratification from him in order to satisfy its own needs. Envy mobilises the impulse to spoil and destroy the breast. As the belief in the goodness of the good object is compromised, so is the capacity for enjoyment and the development of gratitude. Without gratitude and a securely internalised good object, envy cannot be mitigated and goodness will be continually attacked by the bad internalised objects. If, however, the faculty for love and gratitude are strongly developed, the infant will be able to withstand transient envious states without permanently destroying the belief in goodness and capacity for enjoyment (Klein, 1957).

McAdams and Bauer (2004) employed attachment theory (Bowlby, 1969) in discussing the development of gratitude. They stated that the positive responses manifested by securely attached infants when their mother returns after a brief period of absence may include gratitude for her role in re-establishing their feelings of safety. Insecurely attached infants could be expressing ingratitude evoked by the mother's absence when resisting or avoiding her affections. Infantile experiences of gratitude may, therefore, constitute the primitive unconscious origins of a grateful outlook (McAdams & Bauer, 2004). However, the authors further argued that the full experience of gratitude can only develop when the individual is able to make attributions regarding other individuals' behaviour, which is a developmental achievement that is unlikely to occur until early childhood. The child's first task is to recognise that his thoughts, feelings and experiences are his own and are distinct from those of his caregivers. This recognition extends to appreciating others as autonomous individuals. At approximately age 3, the child develops a "theory of mind", which is the recognition that others act intentionally in accordance with their own thoughts, needs and values (Wellman, 1990). According to McAdams and Bauer (2004), theory of mind is a prerequisite for the development of gratitude, as feeling grateful necessitates recognising the intentional actions of others. However, the theories of Klein (1957) and McAdams and Bauer (2004) regarding

the emergence of gratitude in infancy have not been accepted as conclusive, because the infant's capacity for gratitude has not been evaluated empirically (Froh & Bono, 2008).

Graham (1988), in discussing gratitude from the perspective of attribution theory, argued that the experience of gratitude does not develop until late childhood. Attributional theory posits a sequence between cognition, affect and action. Cognitions elicit affect, and affect then motivates subsequent action (Weiner, 1985). Regarding gratitude, perceptions of the benefactor acting intentionally and voluntarily (cognition), lead to the experience of gratitude (affect), which then motivates the beneficiary to reciprocate by prosocial behaviour (action) (Graham, 1988). The link between cognition, affect and action is a developmental milestone that occurs as the child's emotional experiences become differentiated, and particular affects become associated with particular antecedent cognitions (Graham & Weiner, 1986). Graham (1988) reported that this link becomes evident between ages 7 and 10.

In summary, literature suggests that a primitive experience of gratitude may be present in early infancy (Klein, 1957; McAdams & Bauer, 2004). The capacity to understand gratitude as a unique emotional response to a particular antecedent thought may not develop until late middle to late childhood (Graham, 1988). However, a more mature experience of gratitude appears to emerge in early adolescence, as the adolescent becomes less egocentric and considers the benefactor's perspective (Baumgarten-Tramer, 1938). As this study aims to explore the relationship between gratitude and positive psychological functioning, it was necessary to consider at what stage the capacity for gratitude develops. In attempting to understand the benefits of a grateful outlook, the correlates of gratitude in adolescence will be presented next.

3.3 Correlates of gratitude in adolescence

Gratitude seems to be related to many indicators of positive psychological functioning. Firstly, gratitude has been associated with positive affect in both adults (Emmons & McCullough, 2003) and adolescents (Froh, Yurkewicz, et al., 2009); specifically, gratitude correlated with optimism (Froh et al., 2008), hope, inspiration, forgiveness, excitement and pride (Froh, Yurkewicz, et al., 2009) in early adolescence. Positive affect is often seen as a catalyst in the development of personal resources (Fredrickson, 2001, 2004), for example, enhanced problem-solving skills and coping strategies (Reschly, Huebner, Appleton & Antaramian, 2008). The „Broaden and Build“ theory posited by Fredrickson (1998, 2001), describing how positive affect facilitates the development of personal resources, is discussed in paragraph 3.4.

Secondly, gratitude has been associated with adaptive social outcomes. Gratitude is of fundamental importance to enduring social relationships, because recognising and responding to kindness enhances connections between people (Emmons, 2009). The principal purpose of helping another individual is to create an interpersonal bond, and reciprocal exchange is necessary for a cohesive relationship. Research findings have shown that gratitude is related to supportive family relationships and prosocial behaviours in early adolescence (Froh, Yurkewicz, et al., 2009). In early to mid-adolescence, gratitude correlated positively with satisfaction with family and friends (Giménez, Hervás & Vázquez, 2010). Gratitude has also been associated with social integration among adolescents, which refers to the desire to utilise personal strengths in the service of others in the immediate environment and wider social contexts, or a “prosocial and purposeful orientation of wanting to make a unique contribution to one’s community and world” (Froh, Bono, et al., 2010, p. 148). Thus, gratitude appears to contribute to social connectedness at an interpersonal as well as a communal level.

Thirdly, gratitude has been posited to foster the pursuit of intrinsic goals and reduce the prioritisation of materialistic goals (Froh, Emmons, et al., 2011). The authors investigated the effects of gratitude versus materialism among adolescents. Gratitude was associated with intrinsic goals such as social integration, absorption in activities and high academic performance, whereas the opposite was found for materialism. The pursuit of intrinsic goals, for example personal development and social connectedness, is important for optimal development (Bono & Froh, 2009; Kasser, 2002). Excessive focus on extrinsic goals may detract attention from internal needs, lead to considerable concern with external sources of approval, and cause deterioration in relationships as others are only valued for what they can provide (Kasser, 2002).

As gratitude involves wanting what one has rather than what one wants, instilling a sense of gratitude may help people appreciate the gifts of the moment and experience freedom from past regrets and future anxieties. With gratitude comes the realisation that happiness is not contingent upon materialistic happenings in one's life, but rather from being embedded in caring networks of giving and receiving. (Froh, Emmons, et al., 2011, p. 300).

The relationship between gratitude and positive affective states, adaptive social outcomes and promoting intrinsic goal achievement suggests that gratitude is a valuable resource for individuals in negotiating the developmental challenges of adolescence. A brief discussion regarding the manner in which gratitude may facilitate the development of adaptive outcomes follows.

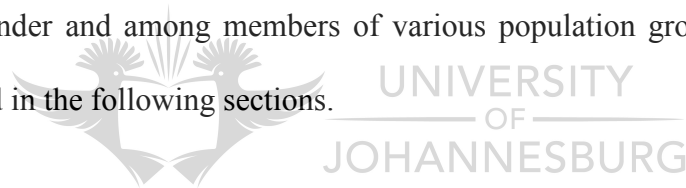
3.4 Gratitude and the development of personal resources

Fredrickson (1998, 2001) advanced the „Broaden and Build“ theory, which asserts that positive emotional experiences facilitate the development of the personal resources associated with SWB. According to Fredrickson (1998, 2001), emotions inform an individual’s thought-action repertoire, or an individual’s perception of his range of available behaviours in response to specific stimuli. Negative emotions, which are typically experienced in threatening situations, have an adaptive function in restricting the individual’s thought-action repertoire to facilitate quick decisions and immediate action. By contrast, positive emotions broaden the individual’s thought-action repertoire, which allows a wider range of information, thoughts and actions to be considered. Through contemplating and acting on a broader perspective of events, the individual is able to build personal resources, for example cognitive skills. Although the emotional experience is transitory, the personal resources that are developed during the positive affective experience are enduring and available for use during future positive and negative experiences. The cumulative development of personal resources enhances the individual’s ability to overcome challenges, which promotes further positive emotional experiences and personal resource development (Fredrickson, 1998, 2001).

Fredrickson (2001) suggested that each positive emotion contributes to the development of specific personal resources. Gratitude seems to be instrumental in fostering creativity and social connectedness (Fredrickson, 2004). The experience of gratitude is posited to broaden the individual’s thought-action repertoire, because the resulting prosocial behaviour tends to imply that the beneficiary was creative in deciding how to express appreciation, as opposed to merely reciprocating with a gift of equal value. Repeated experience with creative efforts at expressing gratitude are inclined to stimulate further creativity and the development of

enduring skills that may be used to respond to kindness or other endeavours requiring inventiveness and resourcefulness (Fredrickson, 2004). Gratitude has been associated with social connectedness (Fredrickson, 2004), because the frequent experience of gratitude tends to evoke the belief that the self is valued by others (McCullough et al., 2001), and repeated prosocial behaviours enhance interpersonal bonds (Emmons, 2009). Therefore, a grateful outlook may be particularly beneficial for adolescents in constructing creative responses that facilitate the development of supportive relationships.

It is evident that gratitude plays an important role in positive developmental outcomes. However, a sound understanding of the benefits of a grateful outlook necessitates considering whether the prevalence of gratitude and the benefits that gratitude confers to well-being vary across different groups of individuals. Existing research has investigated differences in gratitude across gender and among members of various population groups, the findings of which are discussed in the following sections.



3.5 Gratitude and gender

Research findings suggest that there are gender differences in the experience and expression of gratitude in adults (Kashdan et al., 2009). Specifically, the authors found that women, in comparison to men, tended to report higher levels of trait gratitude, experienced gratitude more frequently, and were more secure in experiencing and expressing gratitude. High levels of trait gratitude in women were associated with increased social connectedness and freedom to pursue self-determined goals. Women may, therefore, derive greater benefits from a grateful outlook than men.

Kashdan et al. (2009) argued that gender differences in the prevalence of gratitude arise from differences in the way men and women appraise gratitude-inducing events. As discussed in paragraph 3.1.3, the experience of gratitude is preceded by favourable appraisals regarding

the value of the aid received, the cost incurred to the benefactor, and the motivation behind the benefactor's actions (Wood, Maltby, Stewart, Linley, et al., 2008). Women, in comparison to men, were found to appraise benevolent actions from external sources as a more a positive event, thus experiencing more gratitude. Gender differences in the appraisal process may stem from gender-specific social norms and values (Kashdan et al., 2009). Specifically, women have been found to assign more importance to interpersonal relationships and social concerns than men (Schwartz & Rubel, 2005). Women may, therefore, evaluate kind acts from others more positively than men, and thereby experience more gratitude (Kashdan et al., 2009). Men, on the other hand, typically value power and authority (Schwartz & Rubel, 2005). Thus, men may associate aid received from others as a threat to their capacity for autonomous achievements, appraise the event less positively than women, and thereby experience less gratitude (Kashdan et al. 2009). Furthermore, females tend to express a greater extent of emotions than males (Brody, 2000; Kashdan et al., 2009; Timmer, Fischer & Manstead, 2003), and women's readiness to express gratitude was found to be related to increased well-being (Kashdan et al., 2009). Therefore, the relationship between gratitude and well-being may be stronger for women than for men.

Gender differences in gratitude appear to be less pronounced during early adolescence, as compared to adulthood. Froh, Yurkewicz, et al. (2009) found that girls tended to report higher levels of mood gratitude than boys, although the gender differences were not statistically significant. However, gender appeared to moderate the relationship between gratitude and family support, as a relationship between gratitude and family support was found for boys, but not girls. One hypothesis that was advanced in attempting to explain this finding was that family support may cause gratitude, and this relationship may be stronger in boys than in girls. In cases of lower family support, girls may still report gratitude, because of their tendency to be more grateful than boys (Froh, Yurkewicz, et al., 2009). An alternative

explanation was offered in suggesting that androgyny, as opposed to possessing predominantly masculine or feminine traits, is associated with enhanced well-being (Leftkowitz & Zeldow, 2008) and, therefore, boys with high levels of gratitude (traditionally assumed to be a feminine trait) will experience higher levels of SWB (Froh, Yurkewicz, et al., 2009). However, the authors emphasised the need for further research to clarify the moderating effect of gender on family support.

Previous research has not investigated gender differences in gratitude among youth in South Africa, nor among mid- to late adolescents. This study aims to determine and compare the prevalence of gratitude among male and female adolescents in Gauteng between the ages of 14 and 18 years. Furthermore, this study will seek to establish whether the relationship between gratitude and SWB is consistent across gender during adolescence.

3.6 Gratitude among various population groups

Perceptions of gratitude may be influenced by societal values, and therefore the experience and expression of gratitude may vary across cultures and population groups (Bono et al., 2004; Naito, Wangwan & Tani, 2005). For example, individuals from different population groups may attribute divergent values to a specific gift, and thus vary in the extent to which the gift is appreciated (Bono et al., 2004).

There is limited empirical investigation pertaining to differences in the experience of gratitude among individuals from different population groups. One exception is a study comparing experiences of gratitude across university students from Japan and Thailand (Naito et al., 2005). Students from both countries associated gratitude with positive affect and the motivation to extend prosocial behaviour, as well as feelings of indebtedness. However, the relationship between gratitude and indebtedness was stronger for Japanese students than for Thai students. Furthermore, indebtedness was related to the motivation to extend

prosocial behaviour in male Japanese students, but not female Japanese students. Thus, it seems that a thorough understanding of gratitude requires exploration of whether there are differences in experience of gratitude among members of various population groups.

South Africa is a multi-cultural society; therefore there may be differences in experiences and expressions of gratitude among individuals from different population groups in South Africa. Culture is difficult to define, and may be operationalised in numerous ways. Research conducted among South African populations has frequently used population group as an operationalisation of culture (Allik & McCrae, 2004; Norris et al., 2008; Steyn, Badenhorst & Kamper, 2010). One way in which individuals from the various population groups in South Africa tend to differ from each other, is the extent to which individualistic values versus collectivistic values are endorsed. Individualism and collectivism are often viewed as important constructs in explaining cross-cultural differences in psychological phenomena (Green, Deschamps & Páez, 2005; Triandis, 2001; Triandis & Suh, 2002), including expressions of emotions (Eid & Diener, 2001). Of particular relevance to the current study is the finding that Black and Coloured adolescents in Gauteng reported a greater extent of collectivist values, as compared to Indian and White youth in Gauteng (Norris et al., 2008). Therefore it seems important to determine whether there are differences in gratitude among adolescents from different population groups in South Africa.

Existing literature does not appear to have investigated whether there are differences in the expression and experience of gratitude across population groups in South Africa. This study, therefore, aims to determine and compare the prevalence of gratitude among adolescents from various population groups in Gauteng, as well as establishing whether the relationship between gratitude and SWB varies among adolescents from different population groups.

3.7 Conclusion

Gratitude is the experience of recognising and appreciating the role of external sources in personal benefits. In this study, gratitude is conceptualised as an affective trait, which refers to stable individual differences in the tendency towards gratitude, as well as an affective state, which describes transient experiences of gratitude evoked by environmental events. Gratitude appears to be related to positive affective states, adaptive social outcomes and the promoting of intrinsic goal pursuit during adolescence, all of which may be useful resources for adolescents in facilitating the successful resolution of developmental challenges. Furthermore, the „Broaden and Build“ theory of Fredrickson (1998, 2001), advanced gratitude as a positive emotion that has a causal role in developing creativity and social resources. Gratitude may thus be considered as a psychological strength that plays an important role in positive developmental outcomes. The expression and experience of gratitude may, however, vary across gender and among individuals from different population groups. Existing research has not considered differences in gratitude across gender and different population groups among South African adolescents. It therefore seems important to determine the prevalence of gratitude among South African youth.

The positive psychological outcomes associated with gratitude have been suggested to derive from a relationship between gratitude and SWB (Froh, Bono & Emmons, 2010; Froh, Yurkewicz, et al., 2009). As a grateful outlook involves recognising the good in life, it follows that gratitude will lead to positive evaluations of life and the desire to maintain and enhance positive outcomes (Froh, Bono, et al., 2010). A discussion of SWB follows.

4 SUBJECTIVE WELL-BEING

Subjective well-being (SWB) has been studied extensively in the past decade (Diener, Lucas & Scollon, 2006; Lyubomirsky, 2011; Lyubomirsky, Sheldon & Schkade, 2005). High levels of subjective well-being, apart from being a subjectively desirable state, also confer benefits to individuals and society (Lyubomirsky, King, Diener, 2005). This section begins with a definition of SWB. The correlates of SWB in adolescence are presented, along with factors unique to the South African context which may influence SWB among youth in South Africa. Finally, the determinants of SWB are discussed.

4.1 Defining subjective well-being

4.1.1 Hedonic versus eudaimonic perspectives on well-being

Positive psychological functioning has traditionally been researched from two perspectives, namely hedonism and eudaimonism (Ryan & Deci, 2001). The hedonic perspective holds that well-being consists of subjective positive evaluations of a person's life and frequent experiences of positive affect (Ryan & Deci, 2001). Hedonic well-being is typically operationalised as SWB and encompasses a cognitive and affective component (Diener et al., 1999). The cognitive component is referred to as life satisfaction and involves subjective judgements of global life satisfaction, as well as satisfaction with specific domains of life. The affective component of SWB assesses the frequency of positive emotions, such as joy and pride, versus the frequency of negative emotions, such as despondency and anger. Although life satisfaction, positive affect and negative affect are interrelated, they have been found to be separate constructs with unique contributions to SWB (Diener, 1999). For example, an increase in positive emotion may not necessarily mean that the individual is experiencing less negative affect or increased life satisfaction (Diener et al., 2006).

The eudaimonic view maintains that well-being is distinct from subjective happiness, because pleasure-producing activities are not necessarily healthy or beneficial to well-being (Ryan & Deci, 2001). The eudaimonic view asserts that well-being derives from meaningful engagement in activities conducive to personal and moral growth, or pursuing a “life of virtue and excellence” (Waterman, 2008, p. 240). Eudaimonic well-being is typically operationalised as psychological well-being (PWB) (Ryan & Deci, 2001). This is a relatively new field of inquiry; researchers are yet to reach consensus on precise definition of the constructs, organise theoretical principles, research questions, methodologies and validate assessment instruments (Waterman, 2008). One proposal regarding the constructs of PWB that appears to remain widely cited in literature includes “self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth” (Ryff, 1989, p. 1071).

There is debate in the literature as to whether the degree of overlap between hedonic and eudaimonic well-being makes the distinction in research traditions futile (Kashdan, Biswas-Diener & King, 2008), or whether hedonic and eudaimonic well-being are qualitatively different constructs associated with different outcome variables (Linley, Maltby, Wood, Osborne & Hurling, 2009; Waterman, 2008). Kashdan et al. (2008) argued that a considerable body of research indicates that hedonic and eudaimonic well-being are interrelated, because hedonic well-being is experienced in relation to eudaimonic outcomes; for example, positive affect has been associated with perceptions of meaning in life (King, Hicks, Krull & Del Gaiso, 2006). It has, thus, been emphasised that the distinction between hedonic and eudaimonic well-being should be understood as arising from different academic paradigms, rather than representing separate and unconnected forms of well-being (Biswas-Diener, Kashdan & King, 2009). In order to prevent artificially separated constructs of well-being from hindering research, Kashdan et al. (2008) encouraged researchers to investigate a

broad range of well-being variables, but suggested using precise and narrow operational definitions that allow for comparisons between studies, in order to facilitate a more accurate understanding of well-being. The following section considers the definition of SWB variables used in this study.

4.1.2 Subjective well-being as defined in this study

Research regarding the relationship between gratitude and well-being in adolescence has followed the hedonic perspective on researching well-being (Froh et al., 2008; Froh, Yurkewicz, et al., 2009). This study seeks to contribute to existing literature regarding gratitude and well-being in adolescence and will, therefore, investigate well-being from the hedonic perspective. Accordingly, well-being will be operationalised as SWB, assessing global life satisfaction, domain-specific life satisfaction, and levels of positive and negative affect among adolescents.

4.1.2.1 Global life satisfaction

Global life satisfaction is defined as the individual's subjective judgement of overall contentment with his life (Diener et al., 1999). The individual bases his evaluation of global life satisfaction on criteria that he believes to be important to leading a rewarding life, as opposed to his being directed to think about specific aspects of life. There are certain criteria that appear to be universal in the evaluation of global life satisfaction, such as fulfilling social relationships and engagement in absorbing activities. However, individuals have diverse values and attribute varying degrees of importance to different aspects of their lives when evaluating global life satisfaction (Diener, Sapyta & Suh 1998). For example, self-esteem has a stronger relationship to global life satisfaction among adolescents in individualistic cultures, as compared to adolescents from collectivist cultures (Park & Huebner, 2005). Furthermore, an individual's consideration of global life satisfaction tends to be influenced by information

that is salient at the time of making the judgment (Diener, Lucas, Oishi & Suh, 2002). In illustration of this point, Diener et al. (2002) reported that individuals with high levels of positive affect tended to focus on positive aspects of their lives when constructing evaluations of global life satisfaction, while individuals with high levels of negative affect appeared to pay more attention to challenging aspects of their lives when assessing global life satisfaction (Diener et al., 2002). Thus, evaluating overall satisfaction with life, in the context of information that is valuable and meaningful to the individuals concerned, requires an assessment of global life satisfaction. In this study global life satisfaction will be measured by the Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen & Griffin, 1985).

4.1.2.2 Domain-specific life satisfaction

Domain-specific life satisfaction refers to an individual's evaluation of fulfilment in several key areas of life (Diener et al., 1999). Such information is not intended to provide an indication of global life satisfaction, but rather to generate a differentiated profile of satisfaction across important life domains. Important individual and group differences in satisfaction with specific areas of life are obscured by exclusive reliance on global life satisfaction scores (Gilman & Huebner, 2003; Huebner, 2004). Nuanced profiles of life satisfaction have been utilised to identify positive outcomes associated with satisfaction in different life domains, as well as to identify specific areas of life in which particular groups or individuals may benefit from interventions to enhance well-being (Gilman & Huebner, 2003; Huebner, 1994).

Huebner (1991), following a review of literature and an empirical investigation, argued that the most pertinent domains in the life of youths are family, friends, school, self, and living conditions. In this study, domain-specific life satisfaction will be measured by the

Multidimensional Student's Life Satisfaction scale (MSLSS) (Huebner, 1994), which was developed to measure satisfaction with life in the above-mentioned five domains.

4.1.2.3 Affect balance

Affective experiences are immediate, involuntary responses to salient environmental events (Diener et al., 1999). The affective component of SWB is concerned with the frequency of positive and negative moods and emotions. Higher levels of well-being are associated with an abundance of positive affect and fewer experiences of negative affect (Diener et al., 1999). It is the frequency rather than the intensity of the affect that predicts SWB (Diener, Sandvik & Pavot, 1991). Intense emotional experiences are typically rare and short in duration, and seeking to extend or repeat intense positive emotional experiences is likely to result in disappointment. Having consistent experiences of moderate positive affect are, therefore, fundamental to SWB (Diener, 2000).

Positive and negative affect are not opposite ends of the same continuum, but rather separate variables. Therefore, an increase in positive affective experiences does not necessarily imply a corresponding decrease in negative affect (Diener, Smith & Fujita, 1995). Experiences of both positive and negative affect are appropriate and necessary for personal growth; however, excessive negative affect may compromise SWB. A ratio of 2.9 experiences of positive affect for every experience of negative affect is viewed as a prerequisite for optimal functioning (Fredrickson & Losada, 2005). As positive and negative affect are independent variables, assessments of affect balance require separate measures of the frequency of positive and negative affective experiences. In this study, the frequency of positive affect and frequency of negative affect will be measured by the Affectometer 2 (short form) (Kammann & Flett, 1983).

In order to understand the importance of SWB on psychological functioning, the ensuing section considers the psychological outcomes related to SWB.

4.2 Correlates of subjective well-being in adolescence

SWB appears to be related to numerous aspects of positive psychological functioning. This section discusses the benefits of each facet of SWB separately and highlights some challenges associated with socio-political transformation in post-apartheid South Africa which may impact on South African adolescents' SWB.

4.2.1 Correlates of global life satisfaction

Global life satisfaction in adolescence appears to be associated with various intrapersonal and interpersonal indicators of positive functioning. Specifically, positive correlations have been found between global life satisfaction and internal locus of control (Ash & Huebner, 2001; Gilman & Huebner, 2006), high self-esteem (Huebner, Funk & Gilman, 2000; Gilman & Huebner, 2006) and absorption in intrinsically rewarding properties (Froh, Kashdan et al., 2010), thus suggesting that global life satisfaction is important to adolescents developing sense of self. Furthermore, positive evaluations of life seem to confer benefits to adolescents' interpersonal functioning, as high levels of global satisfaction have been associated with engagement in fulfilling relationships (Gilman & Huebner, 2006), social connectedness (Gilman, 2001), social self-efficacy (Fogle, Huebner, Laughlin, 2002), and low levels of stress associated with interpersonal interactions (Gilman & Huebner, 2006) during adolescence. Research findings have also indicated that decreased global life satisfaction is related to depression, anxiety (Gilman & Huebner, 2006), violent behaviours (Valois et al., 2001) and substance abuse (Zullig et al., 2001). Therefore, global life satisfaction appears to be involved in the development of attributes which may facilitate positive personal and social outcomes during adolescence.

Judgements regarding satisfaction with life are influenced by the context within which the individual is located. Specifically, adolescents in South Africa may encounter difficulties related to the socio-political transformation of the post-apartheid era that may influence evaluations of life satisfaction (Steyn et al., 2010). Researchers have identified factors within the South African context that could be expected to impact on global life satisfaction. On the one hand, many South African adolescents appear to be optimistic that difficulties related to race relations will cease (Everatt, 2002; Steyn et al., 2010) and envisage positive futures in South Africa (Steyn et al., 2010). On the other hand, South African youth reported an unexpectedly high degree of concerns related to issues such as HIV/AIDS, unemployment, crime and poverty (Steyn et al., 2010), all of which could be expected to have a negative impact on evaluations of global life satisfaction. In seeking to foster positive developmental outcomes among adolescents in South Africa, it is important to understand contextual factors which may influence life satisfaction.



4.2.2 Correlates of domain-specific life satisfaction

4.2.2.1 Satisfaction with family

Satisfaction with family refers to evaluations of family functioning and patterns of interaction between family members. During adolescence, parent-adolescent relationships seem to be a predominant factor in familial satisfaction (Caprara, Pastorelli, Regalia, Scabini & Bandura, 2005). Adolescents' satisfaction with family has been posited to facilitate the successful resolution of two of the developmental tasks of adolescence, namely renegotiating parent relationships, and establishing peer relationships (see paragraphs 2.2.2 & 2.2.3).

Familial satisfaction has been associated with adolescents' perceptions of efficacy in exercising a constructive influence in restructuring the parent-adolescent relationship towards a more equal balance of autonomy and authority. This, in turn, encourages further honest

communication with parents and productive styles of conflict resolution (Caprara et al., 2005). Furthermore, the parent-adolescent relationship provides the basis from which the adolescent understands and negotiates relationships with peers. Thus high quality parent-adolescent relationships seem to facilitate the establishment of high quality peer relationships (Furman, Simon, Shaffer & Bouchev, 2002; Parker & Benson, 2004). Satisfaction with family, therefore, appears to be important in the development of social connectedness and social competencies.

Satisfaction with family during adolescence has been reported to have a negative relationship with externalising behaviours that may hinder satisfactory development, for example, substance abuse (Wu, Chong, Cheng & Chen, 2007; Parker & Benson, 2004) aggression towards peers (Spriggs, Iannotti, Nansel & Haynie, 2008), as well as internalising problems, such as depression (Allen, Porter, McFarland, McElhaney & Marsh, 2007). Therefore, in addition to fostering positive development, family satisfaction also seems to be a protective factor against problematic outcomes.

Optimal family structures may have been compromised in many South African families. During apartheid, the enforced migratory labour system frequently required parents to leave rural homelands in order to earn a living. Separation of families has persisted in the post-apartheid era, as many breadwinners are still compelled to migrate to urban areas to find employment (Clark, Collinson, Kahn, Drullinger & Tollman, 2007). Furthermore, the HIV/Aids epidemic has left a considerable number of South African children orphaned (Chazan, 2008). In such circumstances the task of raising children is often left to grandmothers. If grandmothers are overburdened with emotional and financial stressors, their capacity to meet their grandchildren's attachment needs may be hindered (Chazan, 2008). In

seeking to foster the optimal development of South African youth, it is therefore necessary to consider the effects of fractured families on South African adolescents' familial satisfaction.

4.2.2.2 Satisfaction with friends

Satisfactory friendships during adolescence seem to be characterised by trust and mutual self-disclosure (Berndt, 2000), as well as acceptance and popularity within peer groups (Waldrip, Malcolm & Jensen-Campbell, 2008). Peer relationships typically become a priority for adolescents (see paragraph 2.2.3) and the ability to establish supportive friendships appears to be crucial for optimal development.

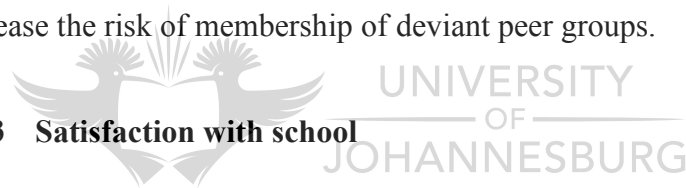
Satisfaction with friends during adolescence has been related to positive psychological outcomes, such as high self-esteem (Tarrant, Mackenzie & Herwitt, 2006), increased positive affect (Cheng & Furnham, 2002), and satisfactory adjustment to the changing social and emotional demands of adolescent years (Waldrip et al., 2008). Furthermore, an adolescent's satisfaction with peer relationships at school has a strong relationship with positive attitudes towards school (Erath, Flanagan & Bierman, 2008; Wei & Chen, 2010) and enhanced academic performance (Erath et al., 2008), thus increasing adaptive development in the school context.

However, membership within deviant peer groups has been related to the development of problematic and antisocial patterns of behaviour during adolescence, both internationally (Monahan, Steinberg & Cauffman, 2009) and in South Africa (Brook, J., Morojele, Pahl & Brook D., 2006; Brook, D., Morojele, Zhang & Brook, J., 2006). Living in economically deprived areas has been viewed as a risk factor for associations with delinquent peers, possibly because poverty-related stressors reduce the quality of the parent-adolescent relationship and availability of parental supervision (Brook, D. et al., 2006). This may be of particular concern to youth in South Africa because of widespread poverty in South Africa

(Brook, D. et al., 2006). Promoting well-being among South African adolescents therefore requires consideration of the effects of poverty on patterns of peer group associations.

On the other hand, the inability to form satisfactory friendships may have adverse consequences for adolescents' development. Peer rejection and social isolation have been related to an increased risk of victimisation, (Juvonen, Graham & Schuster, 2003), internalising problems (Pedersen, Vitaro, Barker & Borge, 2007), specifically depression (Lin et al., 2008; Witvliet, Brendgen, Van Lier, Koot & Vitaro, 2010), as well as externalising behaviour when peer rejection is enduring (Laird, Jordan, Dodge, Pettit & Bates, 2001). Satisfactory friendships during adolescence are, therefore, important in facilitating positive intrapersonal and scholastic outcomes, while association with deviant peer groups and social isolation may compromise adaptive development. The widespread poverty in South Africa may, however, increase the risk of membership of deviant peer groups.

4.2.2.3 Satisfaction with school



Satisfaction with school is defined as a cognitive evaluation of the extent to which school experiences meet the individual's developmental needs (Verkuyten & Thijs, 2002). School is a major part of life during adolescence and provides opportunities for educational attainment, as well as establishing extrafamilial relationships (Verkuyten & Thijs, 2002; Wei & Chen, 2010). Attitudes concerning school have significant effects on an adolescent's learning and socialisation outcomes (Wei & Chen, 2010).

Adolescents with positive evaluations of school, in comparison to those who are dissatisfied with school, tend to obtain higher scores on measures of academic performance (Catalano, Haggerty, Oesterle, Fleming & Hawkins, 2004; Huebner & Gilman, 2006), engage in more extracurricular activities (Gilman, 2001) and display higher levels of social competence (Catalano et al., 2004). Therefore, satisfaction with schooling appears to be important in

fostering adaptive scholastic behaviours and outcomes during adolescence. Furthermore, satisfaction with school has been related to the enhancement of intrapersonal variables such as high self-esteem (Karatzias, Power, Flemming, Lennan & Swanson, 2002), internal locus of control (Huebner & Gilman, 2006), and positive affect (Karatzias et al., 2002), specifically the positive affective state of hope (Huebner & Gilman, 2006), all of which may contribute to optimal development in adolescents.

Dissatisfaction with schooling has been associated with withdrawal from school activities, hostile behaviours at school (Elmore & Huebner, 2010), delinquency (Catalano et al., 2004), and an increased risk of depression (Lin et al., 2008). Therefore, satisfaction with school appears to be an essential component in adolescents' development, specifically their academic and social competencies, both of which will have a profound effect on their functioning in adult life.

Concern has been raised regarding the number of South African learners who drop out of school before completing grade 12 (Department of Basic Education, 2011) and thus do not have the opportunity to develop school-related competencies. According to the Department of Basic Education (2011), approximately 40% of the learners in South Africa who enrol in school, drop out prior to the completion of their school career. Dropping out of school is likely to be the result of multiple factors, some related to and others not related to school (Department of Education, 2008). There are, however, a number of difficulties within the South African schooling system, which could be expected to detract from learners' satisfaction and engagement with schooling and thereby increase the probability of dropping out of school. For example, the Department of Basic Education (2008) has identified problems in schools, such as an increase in crime and violence at school, lack of support for learners with learning difficulties, poor educational achievement, poor infrastructure in

schools and a shortage of teachers. As this study is concerned with optimal development among South African youth, it is necessary to consider difficulties within the school environment which may have a negative impact on attitudes to school, thereby detracting from positive psychological functioning.

4.2.2.4 Satisfaction with self

Satisfaction with self involves positive cognitive evaluations and feeling about the self (Rohany, Ahmad, Rozainne & Wan Shahrazad, 2011). High self-esteem has been posited to confer considerable benefits to individuals and society (Branden, 1994). There is, however, debate in the literature regarding the extent of the benefits of self-esteem.

Baumeister, Campbell, Krueger and Vohs (2003) published a comprehensive and influential review of research findings regarding the benefits of high self-esteem. They argued that the value of high self-esteem is frequently inflated due to measurement and methodological issues. Specifically, the authors reported that satisfaction with self is not related to improved academic performance, has limited benefits to interpersonal functioning, and does not buffer against antisocial behaviour. There were, however, some robust adaptive correlates of satisfaction with self, including resilience, positive affect, persistence, and a decreased risk of depression (Baumeister et al., 2003). Furthermore, a recent longitudinal study, with sound measures and methodology, reported that low self-esteem during adolescence created a risk for problematic outcomes in adulthood, such as an increased probability of developing a major depressive disorder, an anxiety disorder, health problems, incurring criminal convictions, as well as a decreased probability of engaging in tertiary education resulting in fewer employment opportunities (Trzesniewski, Donnellan, Moffitt, Robins, Poulton & Caspi, 2006). Thus, while the extent of the value of satisfaction with self continues to be

debated, there does appear to be evidence that high self-esteem is an adaptive characteristic during adolescence and is important in preventing maladaptive outcomes in adulthood.

Existing literature does not appear to have investigated satisfaction with self as a facet of domain-specific life satisfaction among South African adolescents. However, the manner in which the developmental task of establishing a personal identity is resolved, could be expected to influence satisfaction with self. The development of a personal identity involves integrating personal values and societal norms and values into a coherent sense of self (Erikson, 1963). As discussed in paragraph 2.2.1, identity formation may be particularly challenging for Black South African adolescents who are attempting to incorporate traditional as well as Western value systems into a coherent personal identity (Stevens & Lockhat, 1997). However, more recent research has found that White South African youth reported less affiliation with the national South African identity than Black South African adolescents, which may indicate that White youth are experiencing conflict regarding their identity in the post-apartheid era (Norris et al., 2008). Thus, fostering positive developmental outcomes among South African youth necessitates consideration of the effects of socio-political values on personal identity and satisfaction with self.

4.2.2.5 Satisfaction with living environment

Satisfaction with the living environment encompasses subjective assessments of the individual's family home, the neighbourhood in which the individual resides, and his relationship with members of the community (Huebner, 1991). Research regarding the effects of the living environment on adolescents' well-being appears to have focused on risks associated with living in economically deprived circumstances.

The adverse consequences of living in a low income environment during adolescence include a lack of access to recreational and educational resources (Cicognani, Albanesi & Zani,

2008), social isolation when fears regarding neighbourhood security restricts outdoor activities (Coulton & Irwin, 2009), reduced parental supervision (Rankin & Quane, 2002), a decreased probability of completing school (Brooks-Gunn, Duncan, Klebanov & Sealander, 1993) and an increased risk of depression, anxiety, and externalising behaviour (Aneshensel & Sucoff, 1996) such as substance use (Lemstra, Neudorf, Nannapaneni, Bennett, Scott & Kershaw, 2009). Residing in an environment of economic deprivation thus seems to pose considerable challenges to an adolescent's well-being. As poverty remains widespread in South Africa (Armstrong, Lekezwa & Siebrits, 2008) many adolescents in South Africa may be at risk of problematic outcomes associated with living in an underprivileged environment.

However, social support from community members, particularly from peers, seems to be a protective factor against some of the adverse consequences that living in a dissatisfactory environment may have on an adolescent's well-being (Cicognani et al., 2008). Therefore, an adolescent's capacity to recognise and utilise supportive networks within the community appears to be important for positive development in a dissatisfactory environment. Satisfaction in the domains of friends and school may facilitate engagement in supportive community networks, thus underscoring the importance of satisfaction in these domains in compensating for the consequences of living in an environment of deprivation. As this study is concerned with positive functioning among South African adolescents, it is important to identify challenges and opportunities within the South African context which may impact SWB among youth.

4.2.3 Correlates of positive affect

The affective component of SWB is concerned with the frequency of positive affective experiences (Diener et al., 1999). The importance of positive emotions is emphasised by Fredrickson's (1998, 2001) „Broaden and Build“ theory (see paragraph 3.4), which asserts

that frequent experiences of positive affect are instrumental in the development of personal resources.

The benefits of frequent positive emotions in adults have been well-documented. For example, frequent positive affect is associated with high-quality friendships (Waugh & Fredrickson, 2006), protection against the consequences of stress (Ong, Bergeman, Bisconti & Wallace, 2006), engagement in productive workplace practices (Avey, Wernsing, Luthans, 2008) and having a longer life-span (Danner, Snowdon & Friesen, 2001).

There is, however, considerably less research regarding the correlates of positive affect in adolescents. Most research concerning positive affect during adolescence seems to have described predictors of positive emotions, rather than psychological outcomes associated with the experience of positive effect. For example, some of the predictors of positive affect in adolescence include satisfactory peer relationships (Cheng & Furnham, 2002), absorption in intrinsically rewarding activities (Froh, Kashdan et al., 2010), perceived self-efficacy (Caprara, Steca, Gerbino, Paciello & Vecchio, 2006; Cheng & Furnham, 2002), positive school performance (Cheng & Furnham, 2002), and satisfaction with school (Karatzias et al., 2002).

Research regarding the correlates of positive emotions during adolescence appears to have focused on behaviour at school and coping skills. Frequent experiences of positive affect at school have been associated with investment in learning activities and motivation to succeed, as well as engagement in supportive relationships at school (Lewis, Huebner, Reschly & Valois, 2009; Reschly et al., 2008). Positive emotions have also been found to be predictive of adaptive coping skills in adolescence, which include seeking social support and generating alternative cognitive strategies to overcome challenges (Lewis et al., 2009; Reschly et al.,

2008). Positive affect therefore appears to be important in optimal functioning during adolescence.

The correlates of frequent experiences of positive emotions may be particularly beneficial for South African adolescents in negotiating difficult circumstances which could have a negative impact on SWB. However, Van Schalkwyk and Wissing (2010) found that South African youth reported only a moderate frequency of positive affective experiences. The authors, therefore, advocated interventions aimed at increasing psychological strengths in fostering well-being among South African adolescents. In seeking to promote positive development among South African youth, it is important to consider how positive emotions may contribute to mental health and SWB.

In summary, the research findings discussed above suggest that SWB is important in the development of intrapersonal strengths, interpersonal skills and scholastic competencies during adolescence. Empirical investigation pertaining to SWB among South African adolescents is limited; however, socio-political challenges in post-apartheid South Africa may have an adverse effect on SWB among adolescents in South Africa. Therefore, it seems important to understand the determinants of SWB in order to establish whether levels of SWB can be increased.

4.3 Determinants of subjective well-being

Some suggestions have been offered regarding the determinants of SWB. Research has indicated that each individual has a characteristic level of SWB that remains fairly consistent across time and situation (Diener et al., 1999; Lyubomirsky, Sheldon, et al, 2005; Lyubomirsky, 2011). Characteristic levels of SWB seem to be caused by three factors; the genetic set-point, life circumstances and intentional activity (Lyubomirsky, Sheldon, et al., 2005). The genetic set-point of SWB creates the default range within which levels of SWB

will fall. Life circumstances and intentional activities are the factors which determine the level at which an individual's SWB will fall within the set-point range at a specific time (Lyubomirsky, Sheldon, et al., 2005).

4.3.1 Genetic influences

Genetic influences on the SWB set-point are considered to be temporally stable, enduring, and resistant to change, and account for approximately 50% of an individual's characteristic level of SWB (Lyubomirsky, Sheldon, et al., 2005). Some evidence for the heritability of the SWB set-point comes from studying twins. Lykken and Tellegen (1996) assessed twins' levels of SWB at a ten year interval. The first measure of SWB from one twin was correlated with the second measure of SWB from the other twin (and vice versa). The correlation coefficient for monozygotic twins was significantly higher than for dizygotic twins. Tellegen, Lykken, Bouchard, Wilcox, Segal and Rich (1988) found that levels of SWB were more similar in monozygotic twins raised apart as compared to dizygotic twins raised together. The findings of both studies suggest that SWB may be hereditary to a certain extent. The heritable components of SWB seem to include the personality traits of Extraversion, Neuroticism and to a lesser degree, Conscientiousness (Weiss, Bates & Luciano, 2007), as well as temperament traits, such as sociability and inhibition (Kagan, 2003).

4.3.2 Life circumstances

The second determinant of SWB is life circumstances, which refers to living conditions, cultural influences, demographic factors and personal accomplishments (Lyubomirsky, Sheldon, et al., 2005). Life circumstances account for approximately 10% of an individual's characteristic level of SWB. Following the fulfilment of basic needs, changes in life circumstances, such as moving to a new neighbourhood, do not have a considerable impact on SWB. Lyubomirsky, Sheldon, et al. (2005) continued to argue that the small contribution

of life circumstances to SWB is due to hedonic adaptation or the hedonic treadmill. The concept of hedonic adaptation was advanced to explain the observation that changes in life circumstances tend to result in transient changes to SWB levels, because SWB returns to a neutral baseline level as the individual grows accustomed to the environmental changes (Frederick & Loewenstein, 1999). A study commonly cited in support of the hedonic treadmill reported that winning the lottery did not have enduring effects to SWB (Brickman, Coates & Janoff-Bulman, 1978). More recent research found that positive and negative changes to life circumstances typically influence SWB for three months before the individual's SWB returns to its characteristic level (Suh, Diener & Fujita, 1996). The implications of hedonic adaptation are that changes to external circumstances are unlikely to result in long-term changes to SWB (Lyubomirsky, Sheldon, et al., 2005). This finding may create optimism among researchers and clinicians seeking to increase SWB among South African adolescents, as many South African adolescents experience less than optimal life circumstances that are difficult, if not impossible, to change, such as living in low income areas.

4.3.3 Intentional activities

The final determinant of SWB is intentional activities, which are those practices that an individual deliberately selects to perform, for example, engaging in meaningful extramural activities (Lyubomirsky, Sheldon, et al., 2005). Intentional activities contribute to the remaining 40% of chronic levels of SWB. Examples of intentional activities include behavioural interventions, such as the “gratitude visit”; cognitive interventions, such as “counting blessings”; and volitional activities which refer to the pursuit of personal goals, such as becoming a fitter or kinder person (Lyubomirsky, Sheldon, et al., 2005). Intentional activities are often viewed as the most promising avenue for increasing SWB because, in

contrast to genetic influences, performance of such activities is under the direct control of the individual (Lyubomirsky, Sheldon, et al., 2005). Furthermore, intentional activities may be less susceptible to hedonic adaptation than life circumstances (Lyubomirsky, 2011; Lyubomirsky, Sheldon, et al., 2005; Sheldon & Lyubomirsky, 2006). For example, Sheldon and Lyubomirsky (2006) found that increases in SWB derived from positive activity changes were maintained at a 12-week follow up, while positive changes in circumstances had ceased to influence SWB at a 12-week follow up. Hedonic adaptation occurs when the individual becomes habituated to the stimuli and take the stimuli for granted. Hedonic adaptation may therefore be thwarted if stimuli remain novel and surprising, and continue to attract attention (Lyubomirsky, 2011). Activities, as opposed to changes in life circumstances, tend to be episodic, dynamic and varied. Thus, in comparison to alterations in life circumstances, adaptation to intentional activities tends to be slower (Lyubomirsky 2011). For example, establishing and nurturing a new friendship is likely to provide more enduring effects to SWB than acquiring a better house, as the varied and dynamic aspects of the friendship will take longer to get used to than the better house. Furthermore, the intentional activity of savouring positive experiences can be employed to deliberately counteract hedonic adaptation (Lyubomirsky, Sheldon, et al., 2005).

The question of whether or not SWB can be increased appears to have pervaded literature regarding SWB. Research suggests that it is possible to create enduring changes to levels of SWB through intentional activity, albeit within a genetically determined range (Lyubomirsky et al., 2005). As SWB is associated with numerous indicators of positive functioning during adolescence (Gilman & Huebner, 2006), enhancing SWB seem to be important in facilitating optimal development in adolescents, and may be particularly beneficial to South African youths who experience environmental adversity which may detract from SWB (see paragraph 4.2.2). Researchers interested in increasing SWB among adolescents appear to have focused

on the relationship between gratitude and SWB (Froh et al., 2008; Froh, Yurkewicz, et al., 2009), which will be discussed in paragraph 5 of this chapter.

4.4 Conclusion

The hedonic perspective on well-being is concerned with positive subjective evaluations of life and an abundance of positive affective experiences. Research informed by the hedonic perspective typically assesses SWB. In this study, SWB is operationalised as consisting of global life satisfaction, domain-specific life satisfaction and a preponderance of positive affect over negative affect. Existing literature has reported that life satisfaction and frequent positive emotions are instrumental in the development of intrapersonal strengths, adaptive scholastic attitudes and behaviours, social connections and competencies, and provide some protection against the risk of developing internalising problems and externalising behaviours that may compromise development during adolescence. Previous research does not appear to have explored SWB among youth in South Africa. However, socio-political difficulties in the post-apartheid era, for example fractured families and poverty, may threaten optimal levels of SWB among South African youth. Thus, it seems be important to determine whether SWB can be increased in adolescents in South Africa.

SWB appears to be determined by genetic factors, life circumstances and intentional activity. Novel and appealing intentional activities, such as the gratitude visit and counting blessings, are often viewed as a promising means of increasing levels SWB. The following section considers research on gratitude and SWB in adolescence.

5 ADOLESCENTS, GRATITUDE AND SUBJECTIVE WELL-BEING

The previous sections of this chapter have attempted to illustrate that adolescence is associated with numerous psychosocial developmental tasks. Gratitude has been advanced as a psychological strength that may facilitate the successful resolution of adolescents' developmental challenges through its effects on subjective well-being (SWB). This section will present a review of research findings pertaining to gratitude and SWB during adolescence.

5.1 Gratitude and subjective well-being in adolescence

Research regarding the relationship between gratitude and SWB during adolescence is a fairly new area of enquiry (Froh et al., 2008). Existing literature does, however, appear to provide evidence of a relatively strong relationship between gratitude and the facets of SWB.

5.1.1 Gratitude and life satisfaction in adolescence

Gratitude seems to be related to both global and domain-specific life satisfaction in adolescence. Firstly, trait gratitude has been shown to be a strong predictor of global life satisfaction among mid- to late adolescents (Froh, Emmons, et al., 2011) and high levels of mood gratitude were associated with global life satisfaction among early adolescents (Froh et al., 2008; Froh, Yurkewicz, et al., 2009). Gratitude as a psychological strength, as measured on the Values in Action Inventory of Strengths (Park & Peterson, 2006), had a strong positive correlation with global life satisfaction among mid- to late adolescents (Giménez et al., 2010).

Secondly, gratitude appears to be associated with domain-specific life satisfaction, particularly satisfaction in the domains of school and family. Among early adolescents mood gratitude, specifically, was found to have a moderate positive relationship with satisfaction

with school (Froh et al., 2008; Froh, Yurkewicz, et al., 2009) and family (Froh, Yurkewicz, et al., 2009). Gratitude as a psychological strength, as measured on the Values in Action Inventory of Strengths (Park & Peterson, 2006), was the psychological strength that was the most significant predictor of satisfaction with family in mid- to late adolescents (Giménez et al., 2010). Gratitude also had a moderate correlation with satisfaction with school, satisfaction with self, and weaker correlations with satisfaction with living conditions and friends (Giménez et al., 2010). Thus, gratitude could be associated with global life satisfaction and domain-specific life satisfaction during adolescence.

5.1.2 Gratitude and affective states in adolescence

Research findings regarding the relationship between gratitude and the affective component of SWB during adolescence are somewhat inconsistent. Froh et al. (2008) reported that increases in mood gratitude derived from the counting blessing intervention were not associated with increased positive affect. In contrast, Froh, Yurkewicz, et al. (2009) found that existing levels of mood gratitude had a strong positive correlation with increased positive affect. Froh, Yurkewicz, et al. (2009) argued that it was necessary to identify variables that may moderate the relationship between gratitude and affective states, in order to gain a more accurate understanding of the influence of gratitude on the affective component on SWB. Froh, Kashdan, Ozimkowski and Miller (2009) investigated existing levels of positive affect as a possible moderating variable in the relationship between gratitude and positive affect. Support was found for the moderating influence of positive affect, as the gratitude visit was only effective in increasing positive affect for adolescents who had low levels of positive affect prior to the intervention. These authors suggested that adolescents with high levels of positive affect may have reached an upper limit of SWB and, therefore, derive limited benefits from gratitude interventions. In contrast, adolescents with low levels of positive

affect may experience gratitude infrequently and interventions to increase conscious awareness of the positive aspects of life may confer significant benefits to SWB among these individuals. Thus, there appears to be a relationship between gratitude and positive affect; however, a precise understanding of this relationship would require further empirical investigation.

Gratitude does not appear to be associated with decreased negative affect in adolescence (Froh et al., 2008; Froh, Yurkewicz, et al., 2009). In comparing levels of negative affect between the counting blessings condition, control condition and hassles condition, Froh et al. (2008) found that the gratitude condition and control condition reported less negative affect than the hassles condition. However, as the gratitude condition and control condition reported similar levels of negative affect, it is not clear that counting blessings was related to negative affect (Froh et al., 2008). Froh, Yurkewicz, et al. (2009) also did not find existing levels of mood gratitude to be related to negative affect. Therefore, it seems that gratitude has a stronger relationship with positive affect than with negative affect during adolescence.

It is evident that gratitude is related to SWB in adolescence. However, existing research has not explored the relationship between gratitude and SWB among South African youth. This appears to be an important area of enquiry, because many adolescents in South Africa experience socio-political difficulties that could have a negative impact on SWB and may therefore benefit from efforts to increase SWB. This study will attempt to contribute to existing research regarding gratitude and SWB in adolescence, by exploring the relationship between trait and state gratitude and the different facets of SWB among adolescents in Gauteng.

5.2 Conclusion

This section presented research findings indicating that gratitude is related to SWB in adolescence. The most consistent finding regarding the relationship between gratitude and the facets of SWB appears to be the association between gratitude and global life satisfaction, and gratitude and satisfaction with school and family. A grateful outlook seems to be related to positive affect; however, the precise nature of this relationship is not yet understood. Gratitude can thus be regarded as important to SWB during adolescence.

6 CONCLUDING SUMMARY

Adolescence may be a challenging period because of the number of developmental tasks to be negotiated. It is therefore important to ensure that adolescents are equipped with the psychological resources required to facilitate the successful resolution of developmental tasks. Researchers within the field of positive psychology have identified gratitude as a psychological strength which contributes to subjective well-being (SWB). A grateful outlook has been associated with various aspects of positive functioning, including increased positive affective experiences, social connectedness and the pursuit of intrinsic goals, all of which may be beneficial to the development of adolescents. There appears to be differences in gratitude across gender and among members of various population groups in adults; however, further research is required to understand gender and population group differences in gratitude among adolescents, as well as among South African adolescents. The positive psychological outcomes associated with gratitude are argued to arise from the relationship between gratitude and SWB.

SWB comprises subjective cognitive evaluations of a person's life, as well as an abundance of positive versus negative emotions. Positive evaluations of life and frequent experiences of positive affect appear to benefit intrapersonal development, social competence, and buffer

against the development of internalising problems and externalising behaviours in adolescents. South African youth may, however, encounter environmental challenges arising from socio-political difficulties in the post-apartheid era, which could have an adverse effect on their SWB. Researchers have attempted to identify the determinants of SWB in order to establish whether SWB could be increased. SWB seems to be determined by genetic factors, life circumstances, and intentional activities, the latter of which provides the greatest potential for fostering enduring enhancement to SWB. A grateful outlook, or recognising the good in life, appears to foster SWB in adolescence.

Research findings regarding gratitude and SWB among adolescents have suggested that gratitude has a relatively robust relationship with global life satisfaction, as well as with satisfaction with schooling and family. Gratitude appears to be associated with an increased frequency of positive affective experiences, although further research is required to understand the manner in which this occurs. However, the relationship between gratitude and SWB has not yet been investigated among South African adolescents. This study will determine the prevalence of gratitude, and the relationship between gratitude and SWB among adolescents in Gauteng. The following chapter describes the methodology employed in this study.

CHAPTER THREE: RESEARCH METHOD

1 INTRODUCTION

This chapter presents the research method employed in conducting this study. The research aims are reviewed. Thereafter, the research design, biographical characteristics of the participants, procedure, measuring instruments, ethical considerations and statistical techniques used to analyse the data are described.

2 RESEARCH AIMS

The broad aim of this study was to investigate the prevalence of gratitude, and the relationship between gratitude and subjective well-being (SWB), among adolescents in Gauteng. The specific research aims were:

1. To determine the prevalence of gratitude among adolescents.
2. To determine and compare the prevalence of gratitude among female and male adolescents.
3. To determine and compare the prevalence of gratitude among adolescents from different population groups.
4. To establish the relationship between gratitude and SWB among adolescents.
5. To establish whether the relationship between gratitude and SWB varies across gender among adolescents.
6. To establish whether the relationship between gratitude and SWB varies among adolescents from different population groups.

3 RESEARCH DESIGN

Quantitative methods were used to describe trends in the relationship between pre-existing levels of gratitude and SWB in a large sample of adolescents. The study was an ex-post facto,

cross-sectional, survey research design (Elmes, Kantowitz, Roediger III, 2006). Measures of gratitude and SWB were collected at one point in time by means of self-report questionnaires.

4 PARTICIPANTS

Purposive sampling (Huck, 2009) was employed to select schools in which to conduct the research. In an attempt to ensure that participants from different population groupings were invited to participate in the study, the schools were selected on the basis of geographical location. Three secondary schools were selected, two situated in Johannesburg East and the third in Johannesburg North. Two of the schools are government schools and the third is a private school.

Non-probability convenience sampling (Huck, 2009) was used to obtain participants within the schools, as the selection of participants was based on their availability and agreement to participate in the research. All learners in grades 10 and 11 at the three schools were invited to complete the questionnaires. A group administration method was utilised as the questionnaires were completed while the participants were congregated in a single group (Whitley, 2002).

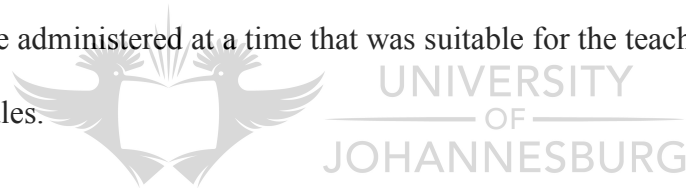
A total of 1144 questionnaires were distributed, of which 891 were returned. This represents a response rate of 77.9%. The high response rate was expected, as according to Whitley (2002), response rates for group-administered questionnaires typically approach 100%. Of the 891 questionnaires that were returned, 79 were incomplete and excluded from the analysis. The final sample comprised 812 learners in grades 10 and 11.

The ages of the participants ranged from 14 to 18 years ($M = 16$, $SD = .91$). Females comprised 52.09% ($n = 423$) of the sample and males 47.66% ($n = 387$) of the sample. With regard to population group, the sample consisted of 56.16% ($n = 456$) Black participants,

7.51% ($n = 61$) Coloured participants, 7.76% ($n = 63$) Indian participants, and 28.33% ($n = 230$) White participants. Two participants did not state their gender or population group.

5 PROCEDURE

The researcher was a student in the Master of Arts (Clinical Psychology) programme at the University of Johannesburg. Prior to commencing the research, the research proposal was approved by the Higher Degrees Committee of the Department of Psychology, University of Johannesburg. Approval to conduct the study in two government secondary schools in Gauteng was obtained from the Gauteng Department of Education (see Appendix 1) and the headmasters of the schools. Permission to distribute questionnaires to learners at one private secondary school was obtained from the headmaster of the school. The researcher made arrangements for the administration of the questionnaires with the teaching staff. Questionnaires were administered at a time that was suitable for the teaching staff and did not impact class schedules.



The researcher described the purpose of the research to grade 10 and 11 learners in the school hall after school assembly and invited the learners to participate in the study. Learners were given a parent information letter and a consent form (see Appendix 2), and those learners willing to participate in the study were asked to obtain parental consent to participate. Learners were advised that handing in a completed questionnaire would be regarded as their consent for their responses to be used the study. The researcher returned to the schools the following week to administer the questionnaire to learners who were willing to participate in the study and who had parental consent to participate. The questionnaire took approximately 15 to 20 minutes to complete. The researcher was available to answer questions.

6 MEASURING INSTRUMENTS

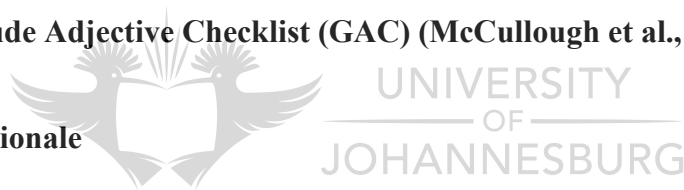
Data was collected by using a self-report questionnaire incorporating a biographical section, two measures of gratitude, and three assessments of SWB. Gratitude was measured using the Gratitude Adjective Checklist (McCullough et al., 2002) and the Gratitude Questionnaire-Six-Item Form (McCullough et al., 2002). SWB was assessed by using the Satisfaction with Life Scale (Diener et al., 1985), the Multidimensional Student's Life Satisfaction scale (Huebner, 1994), and the Affectometer 2 (short form) (Kammann & Flett, 1983).

6.1 Biographical questionnaire

The biographical questionnaire requested information regarding the participants' age, gender and population group.

6.2 The Gratitude Adjective Checklist (GAC) (McCullough et al., 2002)

6.2.1 Rationale



The Gratitude Adjective Checklist (GAC) was designed to measure state or trait gratitude (McCullough et al., 2002). Asking participants to consider their feelings over a longer time period, such as “the past few weeks”, would provide a measure of trait gratitude (Froh, Emmons, et al., 2011), while considerations of feelings over shorter periods such as, “since yesterday”, would assess state gratitude (Froh, Yurkewicz, et al., 2009).

6.2.2 Nature and administration

The GAC is a three-item scale, requiring participants to rate the degree to which they have felt grateful, thankful and appreciative on a five-point Likert scale, ranging from 1 (not at all) to 5 (extremely).

6.2.3 Scoring and interpretation

The scores of the three items are added. The total score ranges between 3 and 15, with the higher scores representing higher levels of gratitude.

6.2.4 Reliability and validity

The GAC does not appear to have been used in research conducted in South Africa; however, findings from research conducted in the USA have indicated that the GAC has strong psychometric properties when measuring gratitude in early adolescents (Froh et al., 2008; Froh, Yurkewicz, et al., 2009). Internal consistency is high, with Cronbach alpha coefficients reported as .70 (Froh, Yurkewicz, et al., 2009) and ranging between .78 and .88 (Froh et al., 2008). A reliability coefficient of .77 was found in this study.

Convergent validity of the GAC has been established among early adolescents, with a strong positive correlation found between the GAC and general positive affect ($r = .67$), and moderate positive correlations between the GAC and global life satisfaction ($r = .37$), satisfaction with family ($r = .33$), and satisfaction with school ($r = .30$) (Froh, Yurkewicz, et al., 2009).

6.2.5 Motivation for use

In this study, the GAC was employed to measure levels of state gratitude, as participants were asked to rate the extent to which they felt grateful, thankful and appreciative “since yesterday”.

6.3 The Gratitude Questionnaire-Six-Item Form (GQ-6) (McCullough et al., 2002)

6.3.1 Rationale

The Gratitude Questionnaire-Six-Item Form (GQ-6) was developed to measure trait gratitude (McCullough et al., 2002). Individuals with high levels of trait gratitude, compared to individuals with low levels of trait gratitude, are often viewed as experiencing gratitude more often (frequency); they experience gratitude as a powerful state (intensity), are more sensitive to recognising life experiences which evoke gratitude (span), and identify a greater number of individuals who may have contributed to their personal achievements (density) (McCullough et al., 2002). The GQ-6 assesses the frequency, intensity, span and density of experiences of gratitude in order to determine levels of trait gratitude.

6.3.2 Nature and administration

Participants indicate their agreement or disagreement with the six items of the GQ-6 on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Sample items include, “I have so much to be thankful for” and “I am grateful to a wide variety of people”.

6.3.3 Scoring and interpretation

The scores of the six items are added, using reverse scoring for items 3 and 6. Scores range from 6 to 42, with higher scores representing higher levels of trait gratitude.

6.3.4 Reliability and validity

The GQ-6 does not seem to have been used in South African research. However, studies conducted in the USA indicate that the GQ-6 has sufficient reliability and validity for use among adolescents. The GQ-6 has high internal consistency, with a Cronbach alpha

coefficient of .76 being reported for mid- to late adolescents (Froh, Emmons, et al., 2011). In this study, a Cronbach alpha coefficient of .65 was found.

Convergent validity of the GQ-6 has been established in adolescent samples through moderate to strong positive correlations with the GAC ($r = .42$ to $.61$), positive affect ($r = .31$ to $.44$), and life satisfaction ($r = .44$ to $.59$). Small to moderate negative correlations were found between scores on the GQ-6 and negative affect ($r = -.09$ to $-.35$), and depression in adolescents ($r = -.24$ to $-.44$) (Froh, Fan, Emmons, Bono, Huebner & Watkins, 2011). However, Froh, Fan, et al. (2011), questioned the construct validity of item 6 of the GQ-6, “Long amounts of time can go by before I feel grateful to something or someone”, when used in adolescent samples. This item was found to have a low factor loading (.21 as compared to the factor loadings which ranged from .52 to .86 for the items 1 to 5), and qualitative comments from some participants indicated uncertainty regarding the meaning of this item. Froh, Fan, et al. (2011) thus suggested that item 6 may not be appropriate for youths.

6.3.5 Motivation for use

The GQ-6 was employed to assess levels of trait gratitude in this study. All six items of the GQ-6 were used, as this was an exploratory study which may provide a basis for future research using the GQ-6 among South African adolescents.

6.4 The Satisfaction with Life Scale (SWLS) (Diener et al., 1985)

6.4.1 Rationale

The Satisfaction with Life Scale (SWLS) was developed to measure global life satisfaction, which comprises a cognitive judgment of life satisfaction (Diener et al., 1985). The individual bases his evaluation of global life satisfaction on criteria that are personally salient and meaningful, as opposed to being directed to think about specific life domains.

6.4.2 Nature and administration

The SWLS contains five items which participants respond to on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Sample items include, “The conditions in my life are excellent”, and “So far I have gotten the important things I want in life”.

6.4.3 Scoring and interpretation

The sum of scores of the five items represents global life satisfaction. Scores range from 5 to 35, with the higher scores representing higher levels of satisfaction with life. Scores above 21 indicate more satisfaction than dissatisfaction with life, a score of 20 represents a neutral point, and scores below 19 suggest dissatisfaction with life (Pavot & Diener, 1993).

6.4.4 Reliability and validity

Research has demonstrated that the SWLS has adequate reliability and validity. The SWLS has yielded high reliability coefficients among adolescents in Sweden ($\alpha = .80$) (Garcia & Siddiqui, 2009), in Hungary ($\alpha = .85$) (Piko, 2007), and in South Africa ($\alpha = .77$) (Van Schalkwyk, 2009). A Cronbach alpha coefficient of .79 was found in this study.

Convergent validity of the SWLS has been established through correlating the SWLS with related measures of well-being. For example, strong positive correlations were found between the SWLS and Andrews and Withey’s (1976) Delighted-Terrible scale ($r = .68$) and Bradburn’s (1969) Positive Affect Scale ($r = .50$ to $.51$), and a moderate negative correlation was found between the SWLS and the Negative Affect Scale ($r = -.32$ to $-.37$) of Bradburn (1969); (Diener et al., 1985).

6.4.5 Motivation for use

In this study, the SWLS was utilised to assess global life satisfaction.

6.5 The Multidimensional Student's Life Satisfaction scale (MSLSS) (Huebner, 1994)

6.5.1 Rationale

The Multidimensional Student's Life Satisfaction scale (MSLSS) was developed to provide a differentiated profile of youth's satisfaction with life in the domains of family, friends, school, self and living environment (Huebner, 1994).

6.5.2 Nature and administration

The MSLSS is a 40-item scale, with different items measuring satisfaction in the domains of family, friends, school, self, and living environment. Participants respond to statements assessing their satisfaction in each domain on a six-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). A sample item from the family domain scale is, "I like spending time with my parents"; a sample item for the friends domain scale is, "My friends treat me well"; a sample item for the school domain scale is, "I like being at school"; a sample item for the self domain scale is, "Most people like me"; and a sample item for the living environment domain scale is, "I like where I live".

6.5.3 Scoring and interpretation

A score of overall life satisfaction is obtained by adding the 40 items, using reverse scoring for negatively worded items, and dividing the total by 40. Domain scores are calculated by adding the scores of the items that measure each domain, using reverse scoring for negatively worded items, and dividing the total by the number of items that measure each domain. Scores range from 1 to 6 for the total score and the domain scores.

6.5.4 Reliability and validity

The MSLSS does not seem to have been used in South Africa; however, research conducted among adolescents in the USA has demonstrated that the MSLSS has adequate reliability and validity. High reliability coefficients have been found in samples of youth from grades 9 to 12 with Cronbach alpha coefficients being reported as .91 for the total score, .86 for the family domain, .82 for the friends, .84 for the school domain, .84 for the self domain, and .79 for the living environment domain (Gilman, Huebner, Laughlin, 2000). Similarly, the MSLSS yielded high reliability coefficients among adolescents in grades 8 to 10, with Cronbach alpha coefficients ranging from .91 to .95 for the total score, .85 to .92 for the family domain, .84 to .89, for the friends domain, .86 to .87 for the school domain, .76 to .84 for the self domain and .82 to .83 for the living environment domain (Antaramian & Huebner, 2009). In this study, the following Cronbach alpha coefficients were found: .88 for the family domain, .84 for the friends domain, .85 for the school domain, .78 for the self domain, and .80 for the living environment domain.

Convergent validity has been established through correlating the MSLSS domain scores with Reynolds & Kamphaus' (1992) Behaviour Assessment System for Children (BASC) adaptive scales and clinical scales. The BASC adaptive scale measure characteristics required for positive functioning and the BASC clinical scale measure maladaptive characteristics. Moderate to strong correlations were found between the MSLSS domain scales and the BASC scales, for example, the MSLSS family scale correlated with the BASC parental relations adaptive scale ($r = .61$); the MSLSS friends scale correlated with the BASC interpersonal relations adaptive scale ($r = .39$); the MSLSS school scale correlated with the BASC attitude towards school clinical scale ($r = -.70$), and the MSLSS self scale correlated with the BASC Self-Esteem adaptive scale ($r = .56$) (Gilman et al., 2000). Researchers have

not identified an appropriate scale to correlate the MSLSS Living Environment scale scores (Huebner & Gilman, 2002). Convergent validity has also been established through correlating parents' perceptions of adolescents' life satisfaction with the self reported scores of adolescents. A moderate positive correlation was found for the total scores ($r = .50$), and moderate to strong positive correlations were found for the domain scales with correlation coefficients being reported as: .51 for Family, .53 for Friends, .55 for School, .42 for Self and .45 for Living Environment (Huebner, Brantley, Nagle & Valois, 2002).

6.5.5 Motivation for use

The MSLSS was utilised to evaluate domain-specific life satisfaction in this study. The MSLSS total score was not used, as the SWLS provided a measure of global life satisfaction that allowed the participants to base their evaluations of overall satisfaction with life on self-selected criteria, as opposed to being directed to consider specific domains of life.

6.6 Affectometer 2 (Short Form) (AFM) (Kammann & Flett, 1983)

6.6.1 Rationale

The Affectometer 2 (short form) (AFM) was developed to measure the frequency of positive and negative affect (Kammann & Flett, 1983). The AFM consists of two equivalent subscales, one of which utilises sentences to assess the frequency of affective experiences; the other comprises adjectives. As the two sub-scales have almost identical psychometric properties, either the sentence subscale or the adjective subscale may be used to save administration time, hence labelled the AFM 2 (Short Form).

6.6.2 Nature and administration

The AFM consists of 10 items assessing the frequency of positive affect and 10 items assessing the frequency of negative affect. Participants are asked to rate how often each feeling was experienced in the last few weeks on a five-point Likert scale, ranging from 1 (not at all) to 5 (all the time). A sample item from the positive affect scale is, “My life is on the right track” and a sample item from the negative affect scale is, “I feel like a failure”.

6.6.3 Scoring and interpretation

Three scores are obtained. Firstly, the frequency of positive affect is calculated by adding the scores of the items measuring positive affect. The total positive affect score ranges from 10 to 50, with higher scores indicating a higher frequency of positive affect. Secondly, the frequency of negative affect is assessed by adding the scores of the items measuring negative affect. The total negative affect score may range from 10 to 50, with higher scores indicating higher occurrences of negative affect. The third score is the balance of positive versus negative affect, which is calculated by subtracting the sum of negative items from the sum of positive items, with higher scores suggesting a predominance of positive emotions.

6.6.4 Reliability and validity

Research has indicated that the AFM has satisfactory reliability and validity. The AFM has high internal consistency with a Cronbach alpha of .90 for the full scale, as found in a sample of late adolescents who were residing in the USA but had also lived in other countries (Peterson & Plamondon, 2009). The AFM has yielded high reliability coefficients when used among South African adolescents, with Cronbach alpha coefficients being reported as .79 for the positive affect scale and .83 for the negative affect scale (Van Schalkwyk, 2009). In this

study, reliability coefficients of .75 for the positive affect scale, and .78 for the negative affect scale were found.

Construct validity of the AFM has been established through correlations between the AFM and related measures in adolescent samples. A strong positive correlation was found between the positive affect scale of the AFM and the experience of happiness during the previous week ($r = .56$), and a moderate positive correlation with the SWLS ($r = .39$) of Diener et al. (1985); (Wilkinson & Walford, 1998). Strong positive correlations were reported between the negative affect scale of the AFM and anxiety ($r = .74$), and depression ($r = .68$) (Wilkinson & Walford, 1998).

6.6.5 Motivation for use

The sentence subscale of AFM was employed to measure the frequency of positive and negative affect in this study.



7 ETHICAL CONSIDERATIONS

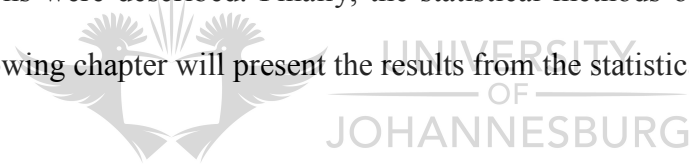
Ethical clearance for the study was obtained from the Higher Degrees Committee of the Department of Psychology, University of Johannesburg. Permission to distribute questionnaires at the two government schools was obtained from the Gauteng Department of Education. Parental consent was obtained prior to learners completing the questionnaire. The researcher informed all prospective participants that participation in the research was voluntary, and that there would be no rewards for completing the questionnaire and no negative consequences for non-participation. Anonymity was ensured in that no identifying information was collected from participants. Learners did not derive any direct benefit from completing the questionnaire, nor were they exposed to any risk.

8 DATA ANALYSIS

Descriptive statistics, Cronbach alpha coefficients, correlation coefficients, one-way analyses of variance (ANOVAs), and a multivariate analysis of variance with follow-up univariate ANOVAs were used to analyse the data. Data was captured and analysed by staff members of Statkon at the University of Johannesburg. All the statistical analyses were conducted on Statistical Package for the Social Sciences (SPSS), (PASW Statistics 18, Release Version 18.0.0).

9 CONCLUDING SUMMARY

This chapter presented the research method used in this study. The research aims were listed, following which the research design, participants, procedure, measuring instruments and ethical considerations were described. Finally, the statistical methods of data analysis were indicated. The following chapter will present the results from the statistical analysis.



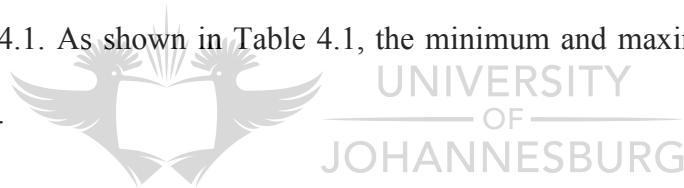
CHAPTER FOUR: RESULTS

1 INTRODUCTION

This chapter presents the results of the statistical analyses implemented in this study. Initially, the descriptive statistics and reliability indices are described. Thereafter, the presentation of the results speaks to the research aims, which, broadly stated, are to determine the prevalence of gratitude, and to establish the relationship between gratitude and subjective well-being (SWB), among adolescents.

2 DESCRIPTIVE STATISTICS

The descriptive statistics comprising the number of participants, the means, standard deviations, minimum and maximum values, and the skewness and kurtosis coefficients are displayed in Table 4.1. As shown in Table 4.1, the minimum and maximum values were in the expected ranges.



Skewness and kurtosis coefficients between 0 and +2 indicate normal distribution of the data (Heppner & Heppner, 2004). Table 4.1 shows that all the variables were normally distributed, with the exception of the MSLSS friends scale, which had a slightly high kurtosis coefficient. However, according to the central limit theorem, the large sample size suggests that the data was normally distributed (Stevens, 2002).

Table 4.1

Descriptive statistics for all measures

	Scale	<i>N</i>	Mean	<i>SD</i>	Min	Max	Skewness	Kurtosis
GAC		812	11.51	2.83	1	15	-.90	.48
GQ-6		812	32.50	5.42	12	42	-.72	.64
SWLS		812	23.32	6.28	5	35	-.45	-.29
MSLSS family		812	4.44	1.15	1	6	-.78	.09
MSLSS friends		812	5.10	.80	1	6	-1.48	3.02
MSLSS school		812	4.14	1.05	1	6	-.41	-.31
MSLSS self		812	5.03	.75	1	6	-1.19	1.89
MSLSS living		812	3.98	1.06	1	6	-.31	-.53
AFM affect balance		812	15.66	11.01	-24	42	-.57	.22
AFM positive affect		812	37.36	5.83	15	50	-.54	.34
AFM negative affect		812	21.70	6.76	8	46	.61	-.06

Note: GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form; SWLS = Satisfaction with Life Scale; MSLSS = Multidimensional Students' Life Satisfaction Scale; AFM = Affectometer 2 (Short Form).

3 RELIABILITY INDICES

Internal consistency refers to the extent to which the different items of a scale measure the same construct (Huck, 2009). Cronbach alpha coefficients were used to examine the internal consistency of all measuring instruments. "Extensive" internal consistency is indicated by a Cronbach alpha coefficient of .70 and above (Robinson, Shaver & Wrightsman, 1991, p. 13). As indicated in Table 4.2, all the instruments, with the exception of the GQ-6, had extensive internal consistency with Cronbach alpha coefficients of more than .70. The Cronbach alpha coefficient for the GQ-6 was .65, which, according to Robinson et al. (1991, p. 13), represents "moderate" internal consistency. The slightly low reliability coefficient may be a result of the questionable construct validity of item 6 of the GQ-6 when used among adolescents, as suggested by Froh, Fan, et al. (2011) (see Chapter Three, paragraph 6.3.4). Conclusions drawn from the GQ-6 will, therefore, be interpreted with caution.

Table 4.2

Reliability coefficients for all measures

Scale	Number of items	Cronbach alpha
GAC	3	.77
GQ-6	6	.65
SWLS	5	.79
MSLSS total	40	.90
MSLSS family	7	.88
MSLSS friends	9	.84
MSLSS school	8	.85
MSLSS self	7	.78
MSLSS living environment	9	.80
AFM positive affect	10	.75
AFM negative affect	10	.78

Note: GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form; SWLS = Satisfaction with Life Scale; MSLSS = Multidimensional Students' Life Satisfaction Scale; AFM = Affectometer 2 (Short Form).

4 THE PREVALENCE OF GRATITUDE AMONG FEMALE AND MALE ADOLESCENTS

Two, one-way analysis of variance (ANOVAs) were implemented to determine and compare the prevalence of gratitude among female and male adolescents. The first ANOVA assessed gender differences in scores on the GAC (measuring state gratitude), and the second ANOVA examined gender differences in scores on the GQ-6 (measuring trait gratitude).

With regard to the parametric assumptions required for the appropriate use of an ANOVA, the dependent variables (scores on the GAC and GQ-6) were normally distributed (see paragraph 2). Levene's test showed that the assumption of homogeneity of variance was fulfilled when considering gender differences in scores on the GAC ($p = .60$), but was violated when assessing gender differences in scores on the GQ-6 ($p = .03$). However, as the Brown-Forsythe F ratio remains robust when the variances are heterogeneous, this statistic was used when examining gender differences on the GQ-6.

The results of the ANOVAs showed a significant effect of gender on both the GAC, $F(1,809) = 6.60, p = .01$, and the GQ-6, $F(1,779) = 16.35, p = .00$. The mean scores obtained by female and male adolescents on the GAC and GQ-6 are displayed in Table 4.3, which indicate that females scored higher than males on both measures. The effect size of the difference between female and male mean scores on the GAC was small ($d = .18$), and moderate ($d = .28$) on the GQ-6.

Table 4.3

Mean scores and standard deviations for female and male participants on the GAC and GQ-6

Scale	Gender	<i>N</i>	Mean	<i>SD</i>
GAC	Male	387	11.25	2.80
	Female	423	11.76	2.82
	Total	810	11.52	2.82
GQ-6	Male	387	31.71	5.65
	Female	423	33.24	5.09
	Total	810	32.51	5.42

Note: GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form

5 THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS

Two one-way analysis of variance (ANOVAs) were used to determine and compare the prevalence of gratitude among Black, Coloured, Indian and White adolescents. The first ANOVA assessed differences among population groups in scores on the GAC (measuring state gratitude), and the second ANOVA examined differences in scores on the GQ-6 (measuring trait gratitude).

With regard to the parametric assumptions required for the appropriate use of an ANOVA, the dependent variables (scores on the GAC and GQ-6) were found to be normally distributed (see paragraph 2); however, Levene's tests showed that assumptions of homogeneity of variance had been violated for scores on the GAC ($p = .00$) and GQ-6 ($p = .04$). As the

Brown-Forsythe F ratio remains robust when variances are heterogeneous, this statistic was used.

The results of the ANOVAs showed that there was a significant effect of population group on state gratitude, $F(3,298) = 4.46, p = .00$. The mean scores obtained on the GAC by Black, Coloured, Indian and White participants are displayed in Table 4.4, which indicate that Indian participants reported the highest scores, followed by Black participants, White participants, and finally, Coloured participants. Tamhane's post hoc tests showed that the only statistically significant difference in mean scores on the GAC was between the scores of Indian and White participants, with Indian adolescents scoring significantly higher on state gratitude than White adolescents. The effect size of this difference was moderate ($d = .45$).

There was no significant effect for population group on trait gratitude, $F(3,258) = .89, p = .45$. The mean scores obtained by participants from the four population groups on the GQ-6 are presented in Table 4.4.

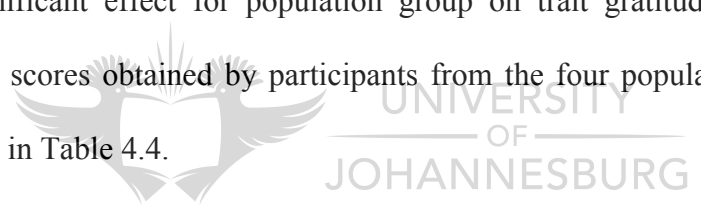


Table 4.4

Mean scores and standard deviations obtained by participants from four population groups on the GAC and GQ6

Scale	Population group	N	Mean	SD
GAC	Black	456	11.68	2.95
	Coloured	61	11.00	2.93
	Indian	63	12.16	1.87
	White	230	11.12	2.71
	Total	810	11.51	2.82
GQ-6	Black	456	32.26	5.12
	Coloured	61	32.18	5.93
	Indian	63	32.68	6.19
	White	230	33.00	5.61
	Total	810	32.50	5.41

Note: GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form

6 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS

The relationship between gratitude and SWB among adolescents was explored by calculating Pearson's product-moment correlation coefficients, and implementing a multivariate analysis of variance, with follow-up univariate analyses of variance (ANOVAs).

Pearson's product-moment correlation coefficients are shown in Table 4.5. Examination of these coefficients reveal that there were statistically significant relationships between the GAC (measuring state gratitude) and all measures of SWB, as well as between the GQ-6 (measuring trait gratitude) and all measures of SWB. The relationships were in the expected directions with positive correlations being found between the measures of gratitude and all the SWB scales, with the exception of negative correlations between the gratitude scales and the AFM negative affect scale. The GAC had weak to moderate correlations with the SWB scales, while moderate to strong correlations were found between the GQ-6 and the SWB scales.

Table 4.5
Correlation matrix for the GAC, GQ-6 and measures of SWB

	1	2	3	4	5	6	7	8	9	10
1. GAC	-									
2. GQ-6	.38*	-								
3. SWLS	.34*	.48*	-							
4. MSLSS family	.31*	.44*	.51*	-						
5. MSLSS friends	.21*	.40*	.31*	.26*	-					
6. MSLSS school	.28*	.34*	.33*	.29*	.28*	-				
7. MSLSS self	.27*	.41*	.39*	.34*	.41*	.38*	-			
8. MSLSS LE	.17*	.35*	.42*	.47*	.30*	.25*	.24*	-		
9. AFM PA	.34*	.50*	.58*	.47*	.40*	.41*	.64*	.31*	-	
10. AFM NA	-.18*	-.45*	-.44*	-.41*	-.39*	-.38*	-.43*	-.39*	-.53*	-

Note. * Correlation is significant at $p \leq 0.01$ level (2-tailed).

GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form; SWLS = Satisfaction with Life Scale; MSLSS = Multidimensional Students' Life Satisfaction Scale; AFM PA = Affectometer 2 (Short Form) positive affect scale; AFM NA = Affectometer 2 (Short Form) negative affect scale.

A multivariate analysis of variance and follow-up ANOVAs were implemented to further investigate the relationship between gratitude and SWB. The data was examined with regard to fulfilling the parametric assumptions of multivariate normality and homogeneity of covariance matrices required for the appropriate use of multivariate analysis of variance. Multivariate normality cannot be assessed on SPSS; however, univariate normality of each variable is a condition of multivariate normality, and should be a sufficient indicator of multivariate normality when using a multivariate analysis of variance (Stevens, 2002). As discussed in paragraph 2, the assumption of univariate normality appears to have been fulfilled. The assumption of homogeneity of covariance matrices was violated. However, as Pillai's trace statistic remains robust when covariances are heterogeneous (Olson, 1976), this statistic was utilised.

The result of the multivariate analysis of variance showed a significant main effect for both the GAC $F(8,787) = 4.08, p = .00$, Pillai's Trace = .04; $\eta_p^2 = 0.04$, and GQ-6, $F(8,787) = 28.83, p = .00$, Pillai's Trace = .23, $\eta_p^2 = .23$, on the combined SWB variables. The results of the follow-up ANOVAs are displayed in Table 4.6. As indicated in Table 4.6, the GAC had a significant effect on three of the dependent variables, namely, SWLS, MSLSS self domain, and the AFM positive affect scale, with effect sizes in the small range. In contrast, the GQ-6 had a significant effect on all the dependent variables, with effect sizes in the moderate range.

Table 4.6

Results from the follow-up ANOVAs for the effect of GAC and GQ-6 on SWB

Independent variables	Dependent Variables	df	<i>F</i> ratio	<i>p</i> value	η_p^2
GAC	SWLS	1,809	24.03	.00	.03
	MSLSS self	1,809	6.55	.01	.01
	AFM positive affect	1,809	19.82	.00	.02
GQ-6	SWLS	1,809	72.36	.00	.08
	MSLSS family	1,809	94.22	.00	.11
	MSLSS friends	1,809	78.20	.00	.09
	MSLSS school	1,809	52.76	.00	.06
	MSLSS self	1,809	75.97	.00	.09
	MSLSS living	1,809	48.84	.00	.06
	AFM positive affect	1,809	108.90	.00	.12
	AFM negative affect	1,809	103.29	.00	.12

Note: GAC = Gratitude Adjective Checklist; GQ-6 = Gratitude Questionnaire-Six-Item Form; SWLS = Satisfaction with Life Scale; MSLSS = Multidimensional Students' Life Satisfaction Scale; AFM = Affectometer 2 (Short Form).

7 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING ACROSS GENDER AMONG ADOLESCENTS

A multivariate analysis of variance was implemented to determine whether there were statistically significant gender by gratitude interactions across the combined SWB variables. The results did not show a significant gender by GAC interaction, $F(8,789) = 1.13, p = .34$, nor a significant gender by GQ-6 interaction, $F(8,790) = 1.23, p = .28$. Therefore, the relationship between gratitude and SWB does not appear to vary across gender among adolescents in this study.

8 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS

A multivariate analysis of variance was implemented to determine whether there were statistically significant population group by gratitude interactions across the combined SWB variables. There was no significant population group by GAC interaction, $F(24,2364) = .83, p = .71$, nor a significant population group by GQ-6 interaction, $F(8,790) = 1.24, p = .19$.

Therefore, the relationship between gratitude and SWB did not appear to vary among adolescents from different population groups in this study.

9 CONCLUDING SUMMARY

The chapter presented the results of the statistical analyses used in this study. The Cronbach alpha coefficients showed that all the measuring instruments had acceptable internal consistency, with the exception of the GQ-6, which had a slightly low reliability coefficient. Conclusions drawn from the GQ-6 was therefore interpreted with caution.

Mean scores obtained on the measures of state and trait gratitude were presented to determine the prevalence of gratitude among adolescents. One-way analyses of variance (ANOVAs) were further implemented to determine and compare the prevalence of gratitude in the context of gender and population group among adolescents. The results showed that female adolescents reported higher levels of state and trait gratitude than male adolescents. The only statistically significant difference in scores on gratitude across different population groups was found between Indian and White adolescents on levels of state gratitude, with Indian adolescents scoring higher than White adolescents in this study.

The relationship between gratitude and subjective well-being (SWB) was established by calculating Pearson's product-moment correlation coefficients, and implementing a multivariate analysis of variance with follow-up univariate ANOVAs. The results provided evidence for a relationship between gratitude and SWB among adolescents. A multivariate analysis of variance was also used to establish whether the relationship between gratitude and SWB varied across gender or population groups. The results did not indicate that the relationship between gratitude and SWB differed across gender or population group. The following chapter will discuss the results that were presented in this section in the context of existing literature.

CHAPTER FIVE: DISCUSSION OF RESULTS, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

1 INTRODUCTION

This chapter discusses the results of the statistical analyses implemented in this study. The discussion is organised in accordance with the six research aims described in Chapter Three. Each section commences with a brief summary of the results of the statistical analyses, following which the results are considered in the context of existing research findings and theoretical perspectives. Finally, the limitations of the study are discussed, and recommendations for further research are offered.

2 THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS

The first aim of this study was to determine the prevalence of gratitude among adolescents. This was investigated by examining mean scores, which showed that adolescents in this study reported levels of state gratitude ($M = 11.51$, $SD = 2.83$) and trait gratitude ($M = 32.50$, $SD = 5.42$) above the mid-point range of the scales. The mean scores obtained by the adolescents in this study were slightly lower than the mean scores reported by early adolescents in the USA for state gratitude ($M = 11.96$, $SD = 2.45$) (Froh, Yurkewicz, et al., 2009) and trait gratitude ($M = 33.17$, $SD = 5.43$) (Froh, Emmons, et al, 2011). Still, it appears that adolescents in Gauteng and adolescents in the USA experience similar, relatively high levels of state and trait gratitude.

Existing research has also assessed trait gratitude in adolescents, using slightly different applications of the GAC and GQ-6. The GAC (which was employed to investigate state gratitude in this study) has been used to measure trait gratitude, with mean scores being reported as 11.21($SD = .2.84$) in mid- to late adolescents (Froh, Emmons, et al., 2011), and

ranging from 10.94 ($SD = 2.87$) to 13.02 ($SD = 2.18$) among early to late adolescents (Froh, Fan, et al., 2011) in the USA. Froh, Fan, et al. (2011) also used the GQ-6 to measure trait gratitude, but did not include item 6 because of the questionable validity of this item. The authors reported mean scores ranging from 28.08 ($SD = 5.11$) to 30.44 ($SD = 4.37$) among early to late adolescents. The similarity of levels of gratitude among adolescents in Gauteng and the USA may support the view that gratitude is a universal experience (Emmons & McCullough, 2003; Emmons & Shelton, 2002; McCullough et al., 2001).

Evolutionary theory has been utilised in offering an explanation for the universality of gratitude (McCullough, Kimeldorf & Cohen, 2008). Advocates of the evolutionary perspective have suggested that the development of certain emotions have been influenced by natural selection, in order to facilitate adaptive responses to the environment, thereby enhancing functioning (Nesse, 1990). The role of gratitude in fostering prosocial behaviour may indicate that gratitude has an evolutionary purpose in increasing cooperation among individuals (McCullough et al., 2008).

Specifically, McCullough et al. (2008) employed Trivers' theory of the „Evolution of Reciprocal Altruism“ (1971) in suggesting that gratitude developed for the unique purpose of enhancing relationships between individuals who are not related to each other. “Reciprocal altruism” is the provision of costly aid to an extra-familial individual with the expectation that a reciprocal act from the beneficiary in the future will increase the benefactor's chances of survival (Trivers, 1971). McCullough et al. (2008) argued that because gratitude is experienced more intensely towards extra-familial individuals as compared to relatives (Bar-Tal, Bar-Zohar, Greenberg & Hermon, 1977), and because gratitude is associated with the development of trust in acquaintances (Dunn & Schweitzer, 2005), it seems likely that gratitude evolved for the distinct purpose of establishing relationships outside of the family.

Gratitude may, therefore, be particularly important during adolescence when dependency on the family is being relinquished and the social world of adolescents becomes increasingly complex.

McCullough et al. (2008) further argued for the specificity of gratitude in fostering extra-familial relationships by stating that reciprocity from family members should not concern benefactors since aiding genetic relatives is in the benefactor's survival interest. Therefore, gratitude should not be elicited by relatives. McCullough et al. (2008) found support for this argument in the study of Bar-Tal et al. (1977), which reported that gratitude is experienced more intensely towards non-kin as opposed to family members. However, school children have been found to express more gratitude towards family members than members of society whom they were not related to, such as teachers and police (Gordon, Musher-Eizenman, Holub & Dalrymple, 2004). This may suggest that the function of gratitude changes in accordance with developmental needs, and that the role of gratitude in promoting reciprocal altruism gains prominence during adulthood. Therefore, gratitude may have an evolutionary purpose in establishing extra-familial relationships, although further research will be required to determine whether the function of gratitude varies across different stages of development.

In conclusion, the adolescents in this study appeared to experience relatively high levels of state and trait gratitude. The levels of gratitude found among youth in this study are comparable to levels of gratitude that have been reported by early adolescents in the USA. These results may provide support for the belief that gratitude is a universally experienced emotion, which in accordance with evolutionary theory, may have developed to foster relationships among extra-familial individuals.

3 THE PREVALENCE OF GRATITUDE AMONG FEMALE AND MALE ADOLESCENTS

The second aim of this study was to determine and compare the prevalence of gratitude among female and male adolescents. The results of the one-way analyses of variance (ANOVAs) indicated that there were statistically significant differences between female and male adolescents' scores on gratitude. Females, compared to males, reported a higher prevalence of state gratitude (female $M = 11.76$, $SD = 2.82$; male $M = 11.25$, $SD = 2.80$) and trait gratitude (female $M = 33.24$, $SD = 5.09$; male $M = 31.71$, $SD = 5.56$). The effect size of the difference between females' and males' mean scores for state gratitude was small ($d = .18$) and for trait gratitude was moderate ($d = .28$).

Existing research has found that early adolescent girls tend to report higher levels of state gratitude than early adolescent boys; however, the gender differences were not statistically significant ($p = .06$) (Froh, Yurkewicz, et al., 2009). This non significant finding may be a consequence of the study not having adequate statistical power to find a small effect size with alpha at the .05 level. According to Cohen (1992), 393 participants would be required in each group to detect a small difference between the mean scores of the two groups; however, the study of Froh, Yurkewicz, et al. (2009) comprised only 154 participants. Thus there may be small differences in the prevalence of state gratitude during early adolescents. Research conducted among adults has indicated that women typically score higher than men on trait gratitude, with effect sizes in the small to moderate range (Kashdan et al., 2009). Therefore, it appears that the prevalence of gratitude varies across gender, with females reporting higher levels of gratitude than males during adolescence and adulthood. These results can further be considered in the context of evolutionary theory and gender stereotypes.

Firstly, gender differences in emotions have often been viewed as having an evolutionary basis. Evolutionary theorists suggest that gender differences have evolved in domains in which males and females require different “sexual selection” strategies (Buss, 1995, 1989; Shackelford, Schmitt & Buss, 2005). For example, adaptive long-term strategies for females include selecting mates who are willing to provide for the family and commit to a long-term investment in the family; the reproductive success of males requires identifying females who are fertile and being certain about the paternity of the child (Buss, 1995). Existing literature does not appear to have discussed gratitude in the context of gender-specific sexual selection strategies. However, the association between gratitude and enduring social relationships (Emmons, 2009) may suggest that gratitude has an adaptive function for females in fostering long-term relationships with mates to ensure their continued investment in the family. On the other hand, recent research has reported that experiencing and expressing gratitude is important for both females and males in maintaining satisfaction with long-term romantic partners (Algoe, Gabel & Maisel, 2010). Thus, it is not clear whether gender differences in sexual selection strategies provide a plausible explanation for the higher prevalence of gratitude among females.

Secondly, the role of gender stereotypes and associated social norms which prescribe different standards of emotional behaviour for males and females may provide a more plausible explanation for variations in levels of gratitude across gender. Specifically, social norms related to expressions of emotions (Brody, 1997, 2000; Kashdan et al., 2009; Timmers et al., 2003) and the appraisal of gratitude-inducing events (Kashdan et al., 2009) seem to be relevant in attempting to interpret gender differences in the prevalence of gratitude.

Gender stereotypes appear to manifest in different expectations regarding the manner in which females and males express emotions. Conformity to socially sanctioned patterns of

behaviour is often viewed as a marker of social competence and thus reinforced by members of society (Brody, 2000). Recent research has reported that females are typically expected to communicate more affective states than males, specifically concerning emotions which express vulnerability (Timmers et al., 2003) and facilitate social connectedness (Kashdan et al., 2009), for example, fear and warmth. In contrast, expression of emotions associated with power, such as fearlessness and pride, tend to be considered appropriate for males (Timmers et al., 2003). As feeling grateful requires recognition of the acts of external sources in personal positive outcomes (Emmons, 2009), gratitude may imply a degree of vulnerability or a focus on interpersonal cooperation which tends to be associated with female stereotypes (Kashdan et al., 2009). Therefore, the results of this study may indicate that adolescents adhere to social standards which favour the expression of gratitude from females, as compared to males.

Further, Kashdan et al. (2009) have argued that gender stereotypes and related social expectations lead to gender differences in appraisals of gratitude-inducing events and thus lead to variations in the experiences of gratitude by females and males (see Chapter Two, paragraph 3.5). Appraisal theorists maintain that an individual's interpretation of an event informs his emotional response (Scherer & Brosch, 2009). Although attribution processes may be influenced by numerous factors, for example, personality traits and individual desires (Reisenzein & Weber, 2008), societal norms and values may also manifest in particular attribution biases (Cole, Bruschi & Tamang, 2002; Kashdan et al., 2009; Scherer & Brosch, 2009). Specifically, social norms which associate male identity with intrapersonal power and female identity with agreeable interpersonal relationships may be relevant to gender differences in the appraisal of aid received from external sources. Males may evaluate the experience of gratitude less favourably than females when acknowledging the benevolence of others threatens their autonomy and power, and thus experience less gratitude than females

(Kashdan et al., 2009). Societal expectations derived from gender stereotypes may therefore lead to gender differences in gratitude, with females expressing and experiencing a higher prevalence of gratitude.

In summary, female adolescents in this study reported higher levels of gratitude than male participants, which is consistent with the findings of existing research regarding gender differences in gratitude (Kashdan et al., 2009). This finding appears to be most satisfactorily explained by gender stereotypes and associated social norms which link the expression and experience of gratitude to feminine identities.

4 THE PREVALENCE OF GRATITUDE AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS

The third aim of this study was to determine and compare the prevalence of gratitude among adolescents from different population groups. Regarding differences in levels of state gratitude across individuals from various population groups, the results of the one-way analyses of variance (ANOVAs) showed that Indian participants reported the highest scores ($M = 12.16$, $SD = 1.87$), followed by the scores reported by Black participants ($M = 11.68$, $SD = 2.95$), White participants ($M = 11.12$, $SD = 2.71$), and finally Coloured participants ($M = 11.00$, $SD = 2.71$). The only statistically significant difference in levels of state gratitude was between Indian and White participants, with an effect size in the moderate range ($d = .45$). No statistically significant differences were found between adolescents from different population groups on levels of trait gratitude, with mean scores ranging from 32.18 ($SD = 5.93$) to 33.00 ($SD = 5.61$). These results could be considered in the context of evolutionary theory, as well as cultural influences on emotional behaviour.

Researchers tend to agree that most emotional experiences comprise universal as well as culturally specific determinants (Kuppens, Ceulemans, Timmerman, Diener & Kim-Prieto,

2006; Oishi, Diener, Scollon & Biswas-Diener, 2004). Firstly, the consistent levels of trait gratitude among adolescents from the four different population groups may provide further evidence in favour of the argument that gratitude is a universal affective trait with an evolutionary basis, which was developed to foster relationships among non-kin (see paragraph 2.1) (McCullough et al. 2008).

Secondly, the difference in the prevalence of state gratitude between Indian and White adolescents in this study may indicate that experience and expression of state gratitude is guided by cultural norms. Cultural norms regarding emotional behaviours are important aspects of socialisation, as they guide socially sanctioned patterns of conduct (Matsumoto, Yoo, Fontaine, et al., 2008). Cultures vary with regard to normative beliefs about the desirability of specific emotions (Eid & Diener, 2001; Matsumoto, Yoo, Fontaine, et al., 2008; Matsumoto, Yoo, Nakagawa, et al., 2008). For example, members of individualistically orientated cultures typically endorse a greater extent of emotional expression than individuals from collectivistic cultures (Matsumoto, Yoo, Fontaine, et al., 2008), particularly regarding emotions which reinforce personal accomplishments, such as pride (Eid & Diener, 2001). In contrast, individuals from collectivistic cultures were found to value emotions which alert the individual to inappropriate actions, for example, guilt (Eid & Diener, 2001). Existing research has indicated that culturally sanctioned patterns of affective behaviours are observable in children and appear to influence affective expressions, as well as appraisal processes (Cole et al., 2002; Halberstadt & Lozada, 2011; Tsai, Louie, Chen & Uchida, 2007). It is therefore possible that cultural norms influence expressions and experiences of gratitude among adolescents.

Despite these views regarding the possible role of cultural differences in experiencing gratitude, it is not clear why Indian adolescents in this study reported a higher prevalence of

state gratitude than White adolescents. In view of the finding of Norris et al. (2008) that Indian and White adolescents in Gauteng tended to report a greater extent of individualistic values in comparison to Black and Coloured adolescents, differences in cultural norms associated with individualistic versus collectivistic orientation do not appear to be relevant to interpreting the findings of this study, since the difference in the scores on state gratitude was found between the two population groups which endorse individualistic attitudes. However, it is possible that cultural influences within Asian nations promote the desirability of the expression and experience of gratitude. Naito et al. (2005) argued that gratitude is highly valued in moral education in Asian countries, and further emphasised the significance of gratitude among individuals from Asian countries by citing government education standards which encourage teachings on the importance of gratitude. Therefore, socialisation practices in Asian societies may seek to promote the recognition and expression of gratitude. Thus, in this study, the higher prevalence of gratitude reported by Indian adolescents, as compared to White participants, may be the result of social norms among Indian communities which emphasise the desirability of gratitude.

To conclude, the prevalence of trait gratitude was consistent among individuals from different population groups in this study. This finding may imply that gratitude is a universal trait with an evolutionary basis. However, Indian participants reported higher levels of state gratitude than White participants, which may suggest that the expression of gratitude is influenced by cultural norms which foster the expression and experience of gratitude among individuals from Indian communities.

5 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS

The fourth aim of this study was to establish the relationship between gratitude and subjective well-being (SWB) among adolescents. The relationship between gratitude and the combined SWB variables was investigated by implementing a multivariate analysis of variance. Statistically significant relationships were found between both state gratitude and trait gratitude and SWB. State gratitude accounted for 4% of the variance in SWB, while trait gratitude accounted for 23% of the variance in SWB. Thus gratitude, specifically trait gratitude, appears to have a strong relationship with SWB during adolescence.

Previous research regarding gratitude and SWB does not appear to have delineated the respective relationships of state and trait gratitude with SWB; thus it is not possible to determine whether the results of this study are consistent with previous findings. However, existing literature does offer a suggestion as to why trait gratitude may have a stronger relationship with SWB than state gratitude. This appears to occur, firstly, via appraisal processes which influence life satisfaction (Wood, Maltby, Stewart, Linley, et al., 2008) and, secondly, via creating a sensitivity for the experience of state gratitude, thereby influencing the balance of affective experiences (Rosenberg, 1998). The following sections consider the results concerning the relationship between gratitude and the facets of SWB in more detail.

6 GRATITUDE AND LIFE SATISFACTION AMONG ADOLESCENTS

The relationship between gratitude and life satisfaction was explored by calculating Pearson's product-moment coefficients and examining the follow-up univariate analyses of variance (ANOVAs). The findings pertaining to gratitude and global life satisfaction are discussed, followed by those regarding gratitude and domain-specific life satisfaction.

6.1 Gratitude and global life satisfaction

The Pearson's product-moment correlation coefficient showed a statistically significant, moderate positive relationship between state gratitude and global life satisfaction ($r = .34$), and a statistically significant, moderately strong, positive relationship between trait gratitude and global life satisfaction ($r = .48$). Similarly, the results of the follow-up ANOVAs indicated a statistically significant main effect of both state and trait gratitude and global life satisfaction, with the respective effect sizes being small ($\eta_p^2 = .03$) and moderate ($\eta_p^2 = .08$). Thus, among participants in this study, trait gratitude had a stronger relationship with global life satisfaction than state gratitude.

The results of this study therefore appear to support existing findings of small to moderate relationships between state gratitude and global life satisfaction (Froh et al., 2008; Froh, Yurkewicz, et al., 2009) and a moderate relationship between trait gratitude and global life satisfaction (Froh, Emmons, et al., 2011) among adolescents. These findings may be interpreted by considering appraisal theory.

The relationship between trait gratitude and life satisfaction may arise from the important role that trait gratitude appears to play in influencing the manner in which environmental stimuli are interpreted. According to the social-cognitive model of Wood, Maltby, Stewart, Linley, et al. (2008), a combination of situational factors and trait gratitude inform attributions of gratitude-inducing events; the attributions are then integrated to form an appraisal of the benefits of the event, which in turn causes state gratitude. Situational factors account for a large percentage of variability in state gratitude. However, individuals with high levels of trait gratitude tend to consistently make more favourable appraisals of a benefactor's actions than individuals with low levels of trait gratitude. Therefore, high levels of trait gratitude tend

to be associated with enduring and persistent individual differences towards recognising positive influences in the environment.

Life satisfaction, as the cognitive component of SWB, involves cognitive judgements of satisfaction with life (Diener et al., 1999). As trait gratitude influences cognitive appraisals towards appreciating benevolence in the external world, high levels of trait gratitude are expected to be related to positive evaluations of life satisfaction (Froh, Yurkewicz, et al., 2009). The results of this study may thus support the importance of trait gratitude in life satisfaction.

In conclusion, trait gratitude had a stronger relationship with global life satisfaction than state gratitude among the adolescents in this study. This finding was discussed in line with appraisal theory, in suggesting that high levels of trait gratitude create a predisposition towards making favourable attributions of benevolent influences in the environment, which, in turn, have a positive impact of cognitive evaluations of global life satisfaction.

6.2 Gratitude and domain-specific life satisfaction

In this study, satisfaction in the domains of family, friends, school, self, and the living environment were explored, as these domains have been argued to be pertinent to youths (Huebner, 1991). The Pearson's product-moment correlation coefficients indicated statistically significant, weak positive relationships between state gratitude and satisfaction in all five domains, with the correlation coefficients ranging from .17 to .31. Statistically significant, moderate positive relationships were found between trait gratitude and satisfaction in the five domains, with correlation coefficients ranging from .35 to .48. The results of the follow-up ANOVAs showed a statistically significant main effect of state gratitude on satisfaction with self, with a very small effect size ($\eta_p^2 = .01$). In contrast, trait gratitude had a statistically significant main effect on satisfaction in all five domains, with

effect sizes in the moderate range, as indicated by partial eta-squared values ranging from .06 to .11. Therefore gratitude, particularly trait gratitude, appears to have a consistent relationship to satisfaction with family, friends, school, self and living environment among participants in this study.

The results of this study are slightly different from existing findings regarding the relationship between state gratitude and domain-specific life satisfaction among early adolescents in the USA. Previous research has reported moderate relationships between state gratitude and satisfaction with schooling (Froh et al., 2008; Froh, Yurkewicz, et al., 2009) and satisfaction with family (Froh, Yurkewicz, et al., 2009), but no relationship to satisfaction with friends, school or living environment. Existing research has focused on the relationship between state gratitude and domain-specific life satisfaction, but has not investigated associations between trait gratitude and domain-specific life satisfaction in adolescence. In summary, the relationship between gratitude and domain-specific life satisfaction appears to be more consistent across the five domains among adolescents in this study, as compared to adolescents in the USA.

Three explanations for the difference in results can be offered. Firstly, compared to prior research, this study may have used a more robust measure of domain-specific life satisfaction. Existing studies concerning gratitude and domain-specific life satisfaction among adolescents have measured domain-specific life satisfaction with the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) (Seligson, Huebner & Valois, 2003), which assesses satisfaction in each domain by means of a single item. The measure of life satisfaction used in this study, the Multidimensional Student's Life Satisfaction Scale (Huebner, 1994), has multiple items to assess satisfaction in each domain and may, therefore, have greater reliability and validity than single item measures (Whitely, 2002). This study

may thus have a more thorough assessment of satisfaction in each domain, compared to previous research. However, literature has indicated that the BMSLSS has acceptable psychometric properties for research among adolescents (Funk, Huebner & Valois, 2006; Seligson et al., 2003). Therefore the differences in the relationship between gratitude and domain-specific life satisfaction among adolescents in this study, compared to results reported in previous studies, do not seem to be solely attributable to different measuring instruments. More research will, however, be required to confirm this interpretation.

A second explanation for the difference in the trends in the relationship between gratitude and domain-specific life satisfaction among the adolescents in this study as compared to adolescents in the USA may encompass different environmental influences in Gauteng and the USA. As discussed in Chapter Two (see paragraphs 4.2.2.1 and 4.2.2.3), many South African adolescents have endured separation from their parents and still encounter considerable adversity within the school system. It is possible that such difficulties may have restricted the range of influences which may evoke gratitude within these domains, and thereby reduce the potential for a grateful outlook that enhances satisfaction with family and school. Confirmation of this suggestion would, however, necessitate exploring South African adolescents' experiences of gratitude at school and with family members, respectively.

The third, and possibly more plausible explanation for the inconsistency between the result of this study and the results of previous research pertaining to the relationship between gratitude and domain-specific life satisfaction, could be the different ages of the participants. Existing research has explored the relationship between gratitude and domain-specific life satisfaction among early adolescents (Froh et al., 2008; Froh, Yurkewicz, et al., 2009), whereas the participants in this study were mid- to late adolescents. It is possible that during early adolescence school and family are central concerns. Younger adolescents may, therefore, be

more likely to value positive influences at school and among family members more than positive influences in the other domains, and thus derive increased satisfaction with school and family. As older adolescents interact with an increasingly complex social world, they may begin to feel grateful for a broader range of influences and thus experience a more pervasive relationship between gratitude and satisfaction with different domains of life. Further research will, however, be required to understand differences in perceptions of gratitude across developmental stages.

In summary, the relationship between gratitude and satisfaction across the domains of family, friends, school, self and living environment was more consistent among adolescents in this study, compared to research conducted among adolescents in the USA. Tentative explanations for this finding were offered, the most plausible of which seems to be that the relationship between gratitude and domain-specific life satisfaction varies across developmental stages of adolescence.



7 GRATITUDE AND AFFECTIVE STATES AMONG ADOLESCENTS

7.1 Gratitude and positive affect

The relationship between gratitude and positive affect was explored by calculating Pearson's product-moment coefficients and examining the follow-up analyses of variance (ANOVAs). The Pearson's product-moment correlation coefficients showed a statistically significant, moderate positive relationship between state gratitude and positive affect ($r = .34$), and a statistically significant, strong positive correlation between trait gratitude and positive affect ($r = .50$). Similarly, the results of the follow-up ANOVAs indicated a statistically significant main effect of both state and trait gratitude on positive affect, with the respective effect sizes being small ($\eta_p^2 = .02$) and moderate ($\eta_p^2 = .12$). Therefore, among adolescents in this study, both state gratitude and trait gratitude were related to an increased frequency of positive

affect, although the relationship between trait gratitude and positive affect was stronger than the relationship between state gratitude and positive affect.

Previous research findings regarding state gratitude and positive affect are inconsistent. Some researchers have found that state gratitude is associated with increases in positive affect (Froh, Yurkewicz, et al., 2009), while other studies have failed to find support for this relationship (Froh et al., 2008). Existing research does not appear to have investigated the relationship between trait gratitude and the affective component of SWB in adolescence. However, weak to strong positive correlations between trait gratitude and positive affect have been found in adults (McCullough et al., 2002). Thus it appears that trait gratitude may have a stronger relationship with positive affect than state gratitude. Subsequently, the relationship between trait gratitude and positive affective experiences will be discussed in the context of existing knowledge on trait gratitude and positive affect.

Firstly, Rosenberg's conception of a hierarchy of affective experiences (Rosenberg, 1998), may provide an explanation for the relationship between trait gratitude and an increased frequency of positive affect. Affective traits are viewed as superordinate to emotional states, due to the organising influence on emotional states. Affective traits are enduring individual differences in the tendency towards particular emotional responses, while affective states are more transient responses that are elicited by a combination of environmental events and affective traits (Rosenberg, 1988). Affective traits organise affective states by creating an increased sensitivity for a particular emotional experience. Trait gratitude creates a predisposition towards experiencing state gratitude (McCullough et al., 2004).

Secondly, Fredrickson's „Broaden and Build“ theory suggests that experiences of state gratitude are associated with further experiences of positive emotions (Fredrickson, 1998, 2001). The author asserted that transient positive emotional experiences broaden the

individual's thought-action repertoire, which facilitates the development of enduring personal resources – the use of which is associated with further positive emotional experiences. Fredrickson (2004) advanced gratitude as a positive emotion which is associated with the development of creativity and social connectedness. Creative endeavours and fulfilling social relationships are likely to engender more positive affective experiences, for example, interest and joy. Therefore, trait gratitude seems to play a fundamental role in evoking state gratitude, which in turn, may foster an upward spiral of positive affective experiences. Although literature provides an explanation for the positive relationship between gratitude and increased frequency of positive affect, the inconsistencies in the relationship between gratitude and positive affect reported in previous studies (Froh et al., 2008; Froh, Yurkewicz, et al., 2009) show that further research is required to identify variables which may effect this relationship.

In conclusion, gratitude was associated with increased frequency of positive affective experiences among adolescents in this study. Trait gratitude, as compared to state gratitude, had a stronger relationship with positive affect, which can be explained by referring to the organising effect of affective traits on affective states (Rosenberg, 1998), and the role of trait gratitude in engendering an upward spiral of experiences of state gratitude and related positive emotions (Fredrickson, 1998, 2001, 2004).

7.2 Gratitude and negative affect

The Pearson's product-moment correlation coefficient showed a statistically significant, although very weak, negative relationship between state gratitude and negative affect ($r = -.18$). The follow-up ANOVA did not find a statistically significant main effect of state gratitude on negative affect. Thus, the results of this study provided little evidence of a relationship between state gratitude and negative affect. In contrast, there appeared to be a

stronger relationship between trait gratitude and negative affect, as the Pearson's product-moment correlation coefficient indicated a statistically significant, negative, moderately strong relationship ($r = -.45$), and the follow up ANOVA showed a significant main effect for trait gratitude on negative affect, with a moderate effect size ($\eta_p^2 = .12$).

Existing research did not find a relationship between state gratitude and negative affect among adolescents (Froh et al., 2008; Froh, Yurkewicz, et al., 2009), and the relationship between trait gratitude and negative affect in adolescence does not seem to have been investigated. However, weak to moderate negative correlations have been reported between trait gratitude and a decreased frequency of negative affect among adults (McCullough et al., 2002). Thus it seems that trait gratitude has a stronger relationship with decreased negative affect than state gratitude. This finding may be explained by referring to Fredrickson's „Undoing Hypothesis“ (Fredrickson, 2000).

Positive and negative emotions are independent constructs and therefore an increase in the frequency of positive emotions does not necessarily create a corresponding decrease in the frequency of negative emotions (Diener et al., 1995). However, Fredrickson (2000) argued that the broadening effect of positive emotions may counteract enduring negative emotions. Threatening stimuli tend to elicit negative emotions, which have the adaptive function of constricting the individual's perceptions of available cognitive and behavioural responses, in order to facilitate an immediate response. Persistent negative emotions, however, tend to cause maladaptive rigidity in thoughts and behaviour and thereby further hinder optimal functioning. For example, fear evokes the thought-action repertoire to escape, but if fear persists in the absence of a threat, restricted thought processes focusing on escape may detract from the individual's capacity to function in his current environment, thereby further frustrating the individual. However, an experience of positive emotions during adversity may

broaden the individual's through-action repertoire and allow for more flexible patterns of thoughts and behaviours, including the use of previously developed personal resources, thereby facilitating efficient functioning. The broadening effect of positive emotions is, therefore, effective in reversing the constricting effect of negative emotions, because the two processes cannot co-occur. According to Fredrickson (2000, p. 8), positive emotions are a "particularly effective antidote for the lingering effects of negative emotions..."

The results of this study indicated a stronger relationship between trait gratitude and a reduced frequency of negative affect, than between state gratitude and a reduced frequency of negative affect. This finding may be explained in line with the arguments presented in paragraphs 6.2 and 7.2, which suggested that trait gratitude influences appraisal processes towards recognising the benevolent actions in the environment (Wood, Maltby, Stewart, Linley, et al., 2008) and creates an increased sensitivity to experiences of state gratitude (Rosenberg, 1998). Therefore, individuals with high levels of trait gratitude may be more likely than individuals with low levels of trait gratitude to recognise positive influences during difficult periods and to experience the positive emotion of gratitude during times of adversity, both of which may facilitate a broader understanding of the challenging situation, thereby undoing the narrowing function of negative emotions. Trait gratitude may thus be related to a decreased frequency of negative affect through its function in organising emotional experiences of gratitude.

Furthermore, individuals with high levels of trait gratitude, compared to those with low levels of trait gratitude, may have experienced state gratitude more frequently during favourable periods of life, and thus had opportunity to develop the associated resources of creativity and social connectedness (Fredrickson, 2004). Therefore individuals with high levels of trait gratitude may have considerable personal resources to utilise in order to overcome adversity

once the broadening effect of positive emotions has been activated, thereby reducing persistent negative affect.

In summary, trait gratitude appears to be associated with a decreased frequency of negative affect among participants in this study. This finding was interpreted in line with arguments suggesting that trait gratitude plays a fundamental role in eliciting experiences of state gratitude (Wood, Maltby, Stewart, Linley, et al., 2008; Rosenberg, 1998) and Fredrickson's „Undoing Hypothesis“ (2000), which maintains that positive emotional experiences may reverse the constricting effect of persistent negative affect and thereby reduce the frequency of negative emotions.

8 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING ACROSS GENDER AMONG ADOLESCENTS

The fifth aim of this study was to establish whether the relationship between gratitude and subjective well-being (SWB) varied across gender among adolescents. As female adolescents in this study reported a higher prevalence of gratitude than male adolescents, a multivariate analysis of variance was implemented to determine whether the relationship between gratitude and SWB varied across gender among adolescents. No statistically significant gender by gratitude interactions were found. Therefore, the relationship between gratitude and SWB appeared to remain consistent for both female and male adolescents in this study.

Existing research has provided some evidence that the relationship between gratitude and well-being varies across gender. Among early adolescents, gratitude was associated with family support for boys, but not girls (Froh, Yurkewicz, et al., 2009). As their research did not aim to identify variables which may have influenced the relationship between gratitude and SWB, the authors offered tentative explanations for the findings. The reverse trend was reported among adults, as a grateful outlook was associated with increased well-being among

women but not men (Kashdan et al., 2009). The authors found that women's tendency towards more frequent expressions of gratitude caused well-being to increase, possibly through enhancing social relationships and savouring positive experiences. It is not clear why the relationship between gratitude and SWB was consistent for both female and male adolescents in the current study. However, in line with Kashdan et al.'s (2009) finding that emotional expressiveness mediated the relationship between gender differences and well-being, perspectives on gender differences pertaining to emotional expressiveness can be offered.

Firstly, it is possible that gender differences in the expression of gratitude become more pronounced during adulthood, and therefore the relationship between expressing gratitude and increased well-being may only occur in adults. Gender differences in social conduct have been posited to arise from gender-specific social roles and occupations which are fulfilled in adulthood (Wood & Eagly, 2002). Specific psychological characteristics and attributes become associated with gender-specific roles and are then communicated to members of society through socialisation practices. However, many gender differences in social conduct observed among adults are not exhibited by youth, because female and male youths are expected to fulfil similar obligations (Schwartz & Rubel, 2005). It could therefore be hypothesised that gender differences in the expression of gratitude, and the relationship between expressing gratitude and increased well-being arise during adulthood when males assume social and occupation roles in which power and autonomy are valued and women fulfil roles which require interpersonal cooperation.

However, Kashdan et al. (2009) reported that gender differences in the expression of gratitude and the related benefits to well-being were evident among university students with a mean age of 23 years. As the university context typically requires similar behaviours from

female and male students (Schwartz & Rubel, 2005), it is not clear that gender differences in the expression of gratitude can only be expected among adults as a result of gender-specific roles and occupations. Therefore, the discrepancies between the findings of this study and the results reported by Kashdan et al. (2009) cannot be entirely explained by differing degrees of emotional expression related to the different ages of the participants.

An alternative suggestion may be that expressing gratitude is equally acceptable among the female and male adolescents in this study and, therefore, both genders derive equal benefit to SWB from communicating gratitude. There is some evidence to suggest that gender stereotypes, particularly with reference to masculine identities, have become more flexible, and social norms may permit males to express some of the softer emotions that are typically associated with feminine identities (Timmers et al., 2003). Thus male adolescents may be increasingly comfortable with expressing gratitude and thus derive benefits to SWB. Support for this hypothesis would, however, require further research exploring social norms regarding masculinity and expressions of gratitude among adolescents in the South African context.

However, existing empirical studies have reported that traditional gender stereotypes and social roles associating power with male identity and more passive behaviours with female identity remain prevalent among some economically deprived communities in the Western Cape, South Africa (Shefer et al., 2008). Therefore many South African adolescents may still be exposed to social norms favouring the communication of specific emotions, including gratitude, by females. Further research will therefore be required to understand whether the consistency of the relationship between gratitude and SWB across gender found among adolescents in Gauteng resulted from social norms which prescribe similar standards for females and males in the expression of gratitude.

To conclude, previous research has indicated that females' willingness to express gratitude was associated with enhanced well-being (Kashdan et al., 2009). The results of this study showed that the relationship between gratitude and SWB is consistent among female and male adolescents. This finding may, therefore, imply that female and male adolescents in this study are equally willing to express gratitude. Tentative explanations for this suggestion included, firstly, gender difference in emotional expression may increase with age as female and male social roles become more pronounced, or alternatively, that the expression of gratitude was desirable for both genders among the adolescents who participated in this study.

9 THE RELATIONSHIP BETWEEN GRATITUDE AND SUBJECTIVE WELL-BEING AMONG ADOLESCENTS FROM DIFFERENT POPULATION GROUPS

The final aim of this study was to establish whether the relationship between gratitude and subjective well-being (SWB) varied across adolescents from different population groups. A multivariate analysis of variance was implemented to determine whether the relationship between gratitude and SWB varied across gender among adolescents. No statistically significant population group by gratitude interactions were found. Therefore, it appears that the relationship between gratitude and SWB remained consistent among adolescents from population groups in this study.

Existing research does not seem to have investigated whether the relationship between gratitude and SWB varies among individuals from different population groups. However, the results will be discussed in the context of evolutionary theory and the possible effect of cultural influences on the relationship between gratitude and SWB.

Firstly, the consistency of the relationship between gratitude and SWB among individuals from different population groups in this study may indicate the existence of universal norms

regarding the expression of gratitude and the desirability of a grateful outlook. As discussed in paragraph 2, evolutionary theorists expect cross-cultural similarities in emotions that have originated to aid survival (Nesse, 1990); gratitude has been posited to have evolved to facilitate reciprocal altruism (McCullough et al., 2008). The results of this study may be interpreted to provide support for the belief that gratitude has an evolutionary basis. Universal perceptions of gratitude may then result in a consistent relationship between gratitude and SWB among the adolescents from different population groups in this study.

Secondly, the results of this study may be considered in the context of cultural similarities among adolescents from different population groups in Gauteng. The individualistic and collectivistic continuum has often been used to describe cross-cultural differences in emotional behaviours (Cole et al., 2002; Eid & Diener, 2001; Matsumoto, Yoo, Fontaine, et al., 2008). Norris et al. (2008) argued that differences between individualistic versus collectivistic cultural orientations are observable among adolescents in Gauteng, with Indian and White youth endorsing a greater extent of individualistic values and Black and Coloured youth tending towards collectivistic attitudes. However, it has been emphasised that individualistic values have gained support in South Africa and are exerting a pervasive influence in the daily lives of most South Africans (Stevens & Lockhat, 1997). Furthermore, research has shown that Black adolescents in South Africa are increasingly adopting individualistic values (Steyn et al., 2010). A study conducted among young adults in military training in South Africa did not find differences in individualism or collectivism among individuals from different population groups (Van Dyk & De Kock, 2004). Therefore, the result of this study may indicate that the participants in this study have similar perceptions of the experience and expression of gratitude, and thus the relationship between gratitude and SWB is consistent among individuals from the different population groups.

In summary, the results discussed in this section indicated that the relationship between gratitude and SWB remained consistent among individuals from different population groups in this study. This finding may imply that adolescents from different population groups have similar norms and values regarding the experience and expression of gratitude, and thus derive equal benefits to SWB from a grateful outlook.

10 LIMITATIONS OF THE STUDY

Several limitations that may have influenced the findings of this study are acknowledged.

Firstly, it was beyond the scope of this study to establish the validity of the measuring instruments. As discussed in Chapter Three, existing research has indicated that the GAC, SWLS, MSLSS, and AFM have demonstrated acceptable validity when used among adolescents. The construct validity of item 6 of the GQ-6 has, however, been questioned when used among youth (Froh, Fan, et al., 2011). It is therefore possible that item 6 of the GQ-6 may not have provided an entirely accurate measure of trait gratitude. However, the correlations between the scores on the GQ-6 and the measure of state gratitude, and the correlations between the scores on the GQ-6 and the subjective well-being (SWB) variables, were in the expected directions and in the moderate or moderate to large range, which may provide some indication that the GQ-6 was an adequate measure of trait gratitude.

Secondly, the effect sizes of the statistically significant results from the follow-up analyses of variance (ANOVAs) for the effect of the trait and state gratitude on SWB were mostly in the small and moderate ranges, which may imply that conclusions drawn from these analyses have limited practical significance. However, these effect sizes are similar to those reported in existing research pertaining to adolescents ($\eta^2 = .03$ to $.09$) (Froh et al., 2008). Furthermore, Froh et al. (2008) argued that effect sizes in this range should not be considered unimportant, due to the large number of variables that influence well-being.

Thirdly, the cross-sectional, non-experimental design of this study negates drawing conclusions pertaining to causality (Elmes et al., 2006). Therefore the results of this study are limited to describing trends in the relationship between gratitude and SWB, as opposed to inferring a causal relationship between gratitude and SWB.

Fourthly, this study was conducted among adolescents from three schools in Gauteng in an attempt to obtain a sample that is representative of adolescents in Gauteng. However, there is no way of knowing whether the participants in this study are representative of the broader adolescent population in Gauteng. Therefore, the results may be limited in generalisability.

Finally, exclusive reliance on self-report information may have a negative impact on the validity of the data (Whitley, 2002). Of relevance to this study is the possibility that responses were influenced by social desirability bias, or the tendency for participants to accentuate aspects of behaviour which conform to social prescriptions (King & Bruner, 2000). As the capacity for gratitude is typically regarded as virtuous (Emmons, 2009), it is possible that participants may have over-estimated the extent of their feelings of gratitude. However, it is hoped that ensuring anonymity by not collecting identifying information from participants would have limited the effects of social desirability bias on the responses of the participants.

11 RECOMMENDATIONS FOR FUTURE RESEARCH

The findings and limitations of this study have highlighted avenues for future research.

Firstly, it is not clear why the relationship between gratitude and subjective well-being (SWB) remained consistent across gender, in view of the finding that female adolescents reported a higher prevalence of trait and state gratitude than male participants. It may be

useful for future researchers to identify variables that moderate the relationship between gratitude and SWB during adolescence.

Secondly, future research may consider comparing the prevalence of gratitude, and the relationship between gratitude and SWB, among early, mid- and late adolescents in order to determine whether there are differences in the prevalence and dynamics of gratitude across the developmental stages of adolescents.

Thirdly, in order to enhance the understanding of the influence of South African social and cultural variables on gratitude and SWB, it may be important to investigate the distinctive features of the South African context that may shape expressions and experiences of gratitude, rather than inferring such influences from differences in scores on gratitude across gender and among individuals from different population groups.

Fourthly, since gratitude was associated with SWB in this study, it is important to investigate the effect of interventions to cultivate gratitude on the positive psychological functioning of adolescents.

Fifthly, this study only investigated SWB, and therefore the relationship between gratitude and psychological well-being, as seen from a eudaimonic perspective, could not be determined.

Finally, in order to overcome the methodological limitations of this study, tasks for future researchers may include establishing the validity of the GQ-6 and obtaining a sample that is more representative of adolescents in Gauteng.

12 CONCLUDING SUMMARY

This study sought to determine the prevalence of state and trait gratitude among adolescents in Gauteng. The results showed that adolescents have positive levels of both state and trait gratitude, which are comparable to levels of state and trait gratitude reported by early adolescents in the USA. In line with evolutionary theory, this finding was interpreted to provide support for the view that gratitude is a universal emotion with an evolutionary basis, which may have been shaped to facilitate the establishment of relationships between extra-familial individuals. However, female adolescents reported higher levels of state and trait gratitude than male adolescents, and Indian adolescents tended to score higher than White participants on state gratitude. Thus, it appears that social norms influence the prevalence of gratitude across gender and among individuals from different population groups. This may occur through social norms which prescribe differential standards of emotional behaviour for females and males, and for individuals from different population groups.

This study further aimed to establish the relationship between gratitude and subjective well-being (SWB) among adolescents. Gratitude, particularly trait gratitude, was found to have a consistent relationship with all the facets of SWB. Appraisal theory was employed in suggesting that trait gratitude is associated with increased life satisfaction, because individuals with high levels of trait gratitude tend to make more positive appraisals of benevolence in the external world, which influences their evaluations of life satisfaction. Trait gratitude seems to be positively related to affective states by creating an increased sensitivity to the experience of state gratitude (Rosenberg, 1998), which in turn may engender an upward spiral of positive affect and the development of personal resources (Fredrickson, 1998, 2001). The relationship between gratitude and SWB was consistent across gender and among adolescents from different population groups in this study. Tentative explanations for

this finding were offered concerning the possibility that male and female adolescents and adolescents from different population groups are exposed to more similar than different social norms regarding the experience and expression of gratitude, and thus derive equal benefits to SWB from a grateful outlook.

It was a privilege to work with so many adolescents who were willing to take the time to complete my questionnaire, as well as inspiring to find that the participants in this study experience a relatively high extent of gratitude.



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**APPENDIX 1: Approval from the Gauteng Department of Education in respect of
request to conduct research**



**UMnyango WezeMfundo
Department of Education**

**Lefapha la Thuto
Departement van Onderwys**

Enquiries: Nomvula Ubisi (011)3550488

Date:	15 October 2010
Name of Researcher:	Croxford Sarah-Anne
Address of Researcher:	53 Buffalo Road
	Emmarentia
	2195
Telephone Number:	0826936408
Fax Number:	N/A
Research Topic:	An Evaluative Study of Gratitude and Subjective Wellbeing among Adolescents in Gauteng
Number and type of schools:	2 Secondary Schools
District/s/HO	Johannesburg East

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

Permission has been granted to proceed with the above study subject to the conditions listed below being met, and may be withdrawn should any of these conditions be flouted:

- 1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
- 2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
- 3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*


Office of the Chief Director: Information and Knowledge Management
Room 501, 111 Commissioner Street, Johannesburg, 2000 P.O.Box 7710, Johannesburg, 2000
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4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and one Ring bound copy of the final, approved research report. The researcher would also provide the said manager with an electronic copy of the research abstract/summary and/or annotation.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

Nomvula Ubisi
DEPUTY CHIEF EDUCATION SPECIALIST: RESEARCH

The contents of this letter has been read and understood by the researcher.	
Signature of Researcher:	
Date:	16 - 10 - 2010

APPENDIX 2: Parental information letter and consent form



Dear Parent

I am currently completing my Master's degree in clinical psychology at the University of Johannesburg and as part of my degree I am conducting research into the relationship between gratitude and happiness in South African adolescents. I would like to ask for your consent for your child to participate in the study by completing a questionnaire that assesses levels of gratitude and happiness. Completing the questionnaire will not cause any direct benefits or risks to your child. Participation in the study is voluntary, confidential and anonymous.

Below is a sample item from the questionnaire:

Please indicate how much you agree or disagree with the statements below by crossing the number next to each statement.

	Strongly disagree	disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
So far I have gotten the important things I want in life	1	2	3	4	5	6	7
I am grateful to a wide variety of people	1	2	3	4	5	6	7

Please complete the section on the back of this page to indicate whether you are willing to let your child participate in the research. The section must be returned to the school by Tuesday 25 January 2011.

If you have any further questions or require feedback on the progress of the research, please feel free to contact me. My contact details are:

Sarah Croxford


Croxfords@vodamail.co.za

082 693 6408

Research supervisor:
Dr Tharina Guse
Department of Psychology
University of Johannesburg
tguse@uj.ac.za
011 559 3248

Please circle the option that applies to you.

I consent /do not consent to my child _____ (name)
completing the questionnaire.

 (your signature)
UNIVERSITY
OF
JOHANNESBURG