

**AN EXPLORATION OF ASPECTS OF MENTAL HEALTH IN SCHOOL-GOING
ADOLESCENTS IN GHANA**

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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated), and that I have not previously, in its entirety or in part, submitted it for obtaining any qualification.

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Abstract

In Ghana, research that focusses on the importance of psychological strengths for adolescent mental health is virtually non-existent. As a result, the pathways to mental health among Ghanaian adolescents have remained unknown. The present study aimed to test a structural model demonstrating the possible pathways to psychological well-being and psychological distress among a sample of school-going adolescents from the Northern region of Ghana. In addition, gender differences in the hypothesised model were also investigated. A secondary aim of the study was to qualitatively explore the adolescents' experiences of hope, perceptions of support and life satisfaction as well as the resistant resources for coping.

A mixed-method, cross-sectional design, was used to gather quantitative and qualitative data on aspects of mental health. Pertaining to the quantitative data, questionnaires were used to gather information on adolescents' experience of hope, perceived social support, life satisfaction and mental health. For the qualitative data, follow-up interviews with selected school-going adolescents were used to solicit in-depth information on how hope, perceptions of support and life satisfaction were engendered. The interviews were also used to delve into the other resources that adolescents capitalised on to manage stressors they encountered. A modified version of a multi-stage cluster sampling was used to randomly select 717 participants from seven schools in the Northern region of Ghana. Using purposive sampling, 18 participants were selected from six of the schools that participated in the quantitative phase of the study. The quantitative data were analysed using structural equation modelling techniques. The qualitative data were analysed using thematic analyses.

The results showed that the hypothesised model fit the observed data. Additionally, the model explained psychological well-being, but not psychological distress. Significant positive relationships were found between perceived social support and psychological well-being, as well as between life satisfaction and psychological well-being. There were also direct relationships

between hope and life satisfaction, perceived social support and life satisfaction, and between perceived social support and hope. The following hypothesised mediated relationships were significant: hope and psychological well-being via life satisfaction; perceived social support and psychological well-being via life satisfaction; and perceived social support and life satisfaction via hope. Moreover, there were also some gender differences in the hypothesised relationships.

Qualitative data on interpretations of hope, perceptions of support and life satisfaction yielded noteworthy results. Firstly, adolescents ascribed hopefulness to confidence in the future, this being engendered through interactions with significant others in their network systems. Secondly, emotional support from parents and instrumental support received from friends emerged as important markers of perceived support from significant others. Thirdly, life satisfaction was tied to the fulfilment of the needs and the maintenance of positive relations with peers. Fourthly, resistant resources for coping involved engagement with the adolescents' network systems and non-governmental organisations to manage academic and financial constraints.

Given that even in low-resource contexts, the pathways to psychological well-being comprised psychological strengths such as hope, perceived social support and life satisfaction, mental health promotion programmes should be aimed at solidifying these strengths to promote adolescents' overall well-being.

Opsomming

In Ghana is daar feitelik geen navorsing wat op die belangrikheid van sielkundige kragte vir adolessente geestesgesondheid toegespits is nie. As gevolg hiervan is die weë na geestesgesondheid onder Ghanese adolessente nog onbekend. Die doel van hierdie studie was om 'n strukturele model te toets wat die moontlike weë na sielkundige welstand en sielkundige nood onder 'n steekproef van skoolgaande adolessente uit die noordelike streek van Ghana sou uitwys. Genderverskille in die hipotetiese model wat opgestel is, is ook ondersoek. 'n Sekondêre doel van die studie was om kwalitatief die adolessente se ervarings van hoop, persepsies van ondersteuning en lewensvrede, sowel as die weerstandshulpbronne vir hanteringsgedrag, te ondersoek.

'n Gemengdemetode-, dwarsneeontwerp is gebruik om die kwantitatiewe en kwalitatiewe ervarings ten opsigte van geestesgesondheid in te samel. Wat betref die kwantitatiewe data, is vraelyste gebruik om inligting oor adolessente se ervaring van hoop, waargenome sosiale ondersteuning, lewensvrede en geestesgesondheid in te samel. Vir die kwalitatiewe data is opvolgonderhoude met geselekteerde skoolgaande adolessente gebruik om indiepte-inligting te verkry oor hoe hoop, persepsies van ondersteuning en lewensvrede opgewek is. Die onderhoude is ook gebruik om te fokus op die ander hulpbronne waarop adolessente gekapitaliseer het om stressors waarmee hulle gekonfronteer is te hanteer. 'n Aangepaste weergawe van 'n multifase-trossteekproef is gebruik om ewekansig 717 deelnemers uit sewe skole in die noordelike streek van Ghana te selekteer. Deur gebruik te maak van doelbewuste steekproefneming, is 18 deelnemers uit ses van die skole geselekteer om aan die kwantitatiewe fase van die studie deel te neem. Die kwantitatiewe data is geanaliseer deur gebruik te maak van strukturele vergelyking-modelleringsmetodes. Die kwalitatiewe data is geanaliseer deur tematiese analises te gebruik.

Die resultate het getoon dat die opgestelde hipotetiese model met die waargenome data ooreengestem het. Bykomend het die model sielkundige welstand verduidelik, maar nie sielkundige nood nie. Betekenisvolle positiewe verhoudings is tussen waargenome sosiale ondersteuning en sielkundige welstand gevind, sowel as tussen lewenstevredenheid en sielkundige welstand. Daar was ook direkte verhoudings tussen hoop en lewenstevredenheid, waargenome sosiale ondersteuning en lewenstevredenheid, en tussen waargenome sosiale ondersteuning en hoop. Die volgende bemiddelde verhoudings, wat as hipotese opgestel is, was beduidend: hoop en sielkundige welstand via lewenstevredenheid, waargenome sosiale ondersteuning en sielkundige welstand via lewenstevredenheid; en waargenome sosiale ondersteuning en lewenstevredenheid via hoop. Verder was daar ook 'n paar genderverskille in die verhoudings, wat as hipotese opgestel is.

Kwalitatiewe data oor interpretasies van hoop, persepsies van ondersteuning en lewenstevredenheid het noemenswaardige resultate opgelewer. Eerstens het adolessente hoopvolheid aan vertrouwe in die toekoms toegeskryf, en dit is opgewek deur interaksies met betekenisvolle persone (*significant others*) in hulle netwerkstelsels. Tweedens het emosionele ondersteuning van ouers en instrumentele ondersteuning ontvang van vriende geblyk om belangrike merkers van waargenome ondersteuning van betekenisvolle persone te wees. Derdens is lewenstevredenheid gekoppel aan die vervulling van die behoeftes en die handhawing van positiewe verhoudings met eweknieë. Vierdens het weerstandshulpbronne vir hanteringsgedrag behels dat daar skakeling met die adolessente se netwerkstelsels en nieregeringsorganisasies was om akademiese en finansiële beperkings te kon hanteer.

Gegewe dat, selfs in laehulpbrontekste, die weë na sielkundige welstand bestaan het uit sielkundige kragte soos hoop, waargenome sosiale ondersteuning en lewenstevredenheid, is dit belangrike dat geestesgesondheidsbevorderingsprogramme gerig word daarop om hierdie kragte te solidifiseer om sodoende adolessente se algehele welstand te bevorder.

Statement Regarding Bursary and Manuscripts from this Dissertation

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Dedication

I dedicate this dissertation to my family. You have always been there supporting me.

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List of Abbreviations

BASC: Behavioral Assessment System for Children

CAMFED: Campaign for Female Education

CFA: Confirmatory Factor Analysis

CPN: Community Psychiatric Nurses

DALY: Disability Adjusted Life Years

DSM-V: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition

EFA: Exploratory Factor Analysis

GHS: Ghana Health Service

GHQ: General Health Questionnaire

GRRs: Generalised Resistant Resources

IHS: Integrative Hope Scale

LGD: Local Government Divisions

MHI: Mental Health Inventory

MHP: Mental Health Promotion

MSLSS: Multidimensional Student Life Satisfaction Scale

MSPSS: Multidimensional Scale of Perceived Social Support

NGO: Non-Governmental Organisation

PLWHA: People Living With HIV/AIDS

SEM: Structural Equation Modelling

SOC: Sense of Coherence

SHS: Senior High School

SWB: Subjective Well-Being

USA: United States of America

VIA-IS: Values In Action-Inventory of Strengths

WHO: World Health Organisation

Chapter 1: Introduction

This chapter describes the research problem and provides a background to, and context for, the study. This section addresses the lack of research within the field of adolescent mental health, especially within the African region and Ghana specifically. A review of mental health research in Ghana, mental health promotion and the discourse of positive psychology are discussed briefly. This section concludes with the rationale, the aims and an outline of this dissertation.

1.1. Problem Statement and Focus

Vested interest in social science research and most of the psychology literature on the mental health of adolescents has been given to problematic behaviours and negative life outcomes (Damon, 2004; Larson, 2000; Marques, Pais-Ribeiro, & Lopez, 2011). This has led to a general neglect of research that enhances knowledge about the positive aspects of mental health, which is described as a state of well-being. According to some researchers, the neglect of adolescent mental health is due to the conception that adolescence is a transitory stage, and the turmoil or challenges faced are normal for individuals in that period of their lives (Coleman & Hagell, 2007; Crockett & Crouter, 2014; Seiffge-Krenke, 1995). Consequently, there has been a skewed focus on the problems that tend to arise at this stage without adequate attention being given to developmental opportunities that are also apparent. The absence of sufficient evidence on the positive experiences necessary for the enhancement of the mental health of adolescents has provided the impetus for the present study.

In line with the view of mental health as a state of well-being and adequate functioning (Petersen, 2010; Rangaswamy et al., 2001; World Health Organisation (WHO), 2011), scholars in the field including Keyes have argued that there is a dual continuum of mental health rather than a singular bipolar continuum (Keyes, 2003, 2005, 2007; Keyes &

Simoes, 2012). This dual continuum comprised a separate continuum measuring positive mental health and another continuum addressing the presence or absence of psychological distress. Additionally, apart from the literature demonstrating the presence of a dual continuum of mental health, there has been notable empirical evidence on the benefits of positive mental health (Keyes & Simoes, 2012; Keyes et al., 2008). An important benefit of positive mental health is the experience of optimal functioning and reduced likelihood of mental ill-health (Keyes et al., 2012). This is in contrast to the weakness of the pathogenic model, which is based on the notion of the presence of a singular bipolar continuum of mental health (measuring the presence or absence of mental ill-health). As already indicated, the dual continuum of mental health is explained by viewing mental health not as the absence of disease (mental illness), but instead as a positive state of well-being (Keyes, 2007). This position has guided the focus of the current study on the aspects of mental health among the adolescent population of the Northern region of Ghana, which is currently underrepresented in the literature.

Given the above proposition by Keyes (2007), it could be argued that research on the mental health of adolescents that focusses on the pathogenic model would only result in increased life expectancy that is not accompanied by optimal psychological well-being. Moreover, the need for positive development that underlies the stage of adolescence, necessitates a greater research focus on positive attributes that would enhance the mental health of adolescents in academic, social and interpersonal domains (Larson, 2000). A response to the need to investigate the positive factors for mental health is reflected in the renewed interests in mental health promotion and positive psychological research.

Research on adolescent mental health in Ghana has focussed mainly on issues such as bullying (Owusu, Hart, Oliver, & Kang, 2011), academic stress (Cole et al., 2014), alcohol use (Oliver, Owusu, Cole, Dickson, & Sowah, 2012), family structures and mental health

problems (Oliver, Dickson, Cole, & Sowah, 2012). There have been limited considerations of the factors for positive mental health among adolescents in Ghana (Cole et al., 2014; Salifu Yendork & Somhlaba, 2015). The current study, therefore, quantitatively and qualitatively explored possible factors such as hope, perceived social support and life satisfaction as aspects and precursors of mental health that could be integral to the adolescent well-being in the Northern region of Ghana.

The findings of the current study have the likelihood of having a number of impacts. The use of a large sample size to test whether the hypothesised model would fit the observed data could be regarded as a notable contribution to positive psychological research in Ghana, because it allowed for generalisation of findings among adolescents. Additionally, the current study would illustrate possible gender differences in the relationships between hope, perceived social support, life satisfaction and mental health. Another impact of the current study is that it would yield information on the relationships among several aspects of mental health in a sample of school-going adolescents living in a context of poverty. Relatedly, the present study addresses the research gap on the absence of qualitative studies exploring hope, perceived social support and life satisfaction among adolescents in the Ghanaian context. In this regard, interventions for promoting mental health can be developed based on information on how these constructs are engendered in this context, despite the prevailing socio-cultural conditions.

Moreover, the scale used in the present study allowed mental health to be conceptualised as comprising psychological well-being and psychological distress. This enabled the present study to show the possible relationships between hope, perceived social support, life satisfaction and psychological well-being and between the above mentioned constructs and psychological distress. Significant relationships between these constructs and mental health would demonstrate that adolescents with adverse life situations can also

experience well-being when positive psychological factors such as those explored in this study are promoted. Lastly, the current study also hopes to contribute to the body of research showing that adolescence is not only a period of turmoil, but rather there are purely positive experiences that are valuable in enhancing their psychological well-being.

1.2. Terminological Considerations

Before the discussion of the adolescent mental health is done, it is worth defining key concepts that are central to the determination of the aspects of mental health for this Ghanaian school-going adolescent population. These concepts are adolescence, mental health, hope, perceived social support, and life satisfaction.

1.2.1. Adolescence

Adolescence is considered as a period of preparation for adulthood, physical maturity, a time for developing a complex understanding of roles as well as harnessing the necessary skills for work and family assignments (Crockett & Crouter, 2014; Crockett & Petersen, 1993). The onset of puberty characterises one of the first and major physiological developments. This period is accompanied by hormonal development that is approximate to adult biological and psychological maturity. All these changes move the child in the direction of becoming a responsible adult in society (Adams, 1968). During this stage, adolescents experience a wave of social influences from their peers, parents and society and are usually caught in a web of trying to make age-appropriate decisions (Crockett & Crouter, 2014; Shaffer & Kipp, 2013).

Erikson (1968), in his theory of psychosocial stages of development, described that adolescence spans the age range of 12 to 18 years, on the one hand. Newman and Newman (1995), on the other hand, identify two distinct stages, early and late adolescence. Early adolescence spans the ages of 12-18, and is characterised by intense physical changes as well as significant mental and emotional maturation. Late adolescence, which spans the period of

18-22 years, is peculiar for the increasing need of autonomy from the family and the development of individual identities. Other authors identify three stages, which include early, middle and late adolescence (Loxton, 2005). Newman and Newman's (1995) age ranges best reflected the age group of the research participants in the present study.

1.2.2. Mental health

The lack of consensus on the definition for health has led to different theories competing for centre stage as to what health should be. The WHO Ottawa Charter on health promotion (WHO, 1986) provides a good reference point, although not without contention. Some authors have defined health as the absence of disease, a state of statistical normality (Seedhouse, 1995) and the ability to function adequately (WHO, 1986). This lack of consensus is also reflected in the presence of limited theories on mental health and minimal consensus about what mental health should entail. On the one hand, most psychological theories are focussed on the definition of mental health as the absence of negative psychological symptoms. On the other hand, some theories (such as Seligman's well-being theory) highlight the importance of understanding mental health as a state of optimal health and not the absence of disease (Seligman, 2011). There are still others who are interested in health in its positive sense, but believe that health cannot be understood in isolation from the disease model.

In light of these contentions, mental health is currently considered to be "integral to an individual's well-being and functioning, enabling him or her to realise his or her abilities and to cope with the normal stresses of life" (WHO, 2011). Mental health also refers to the ability of a person to be socially integrated, fulfil societal expectations and adjust to change in response to the demands of the environment (Bhugra, Till, & Sartorius, 2013). The current prominence that has been given to functionality and social integration has influenced the way mental health was measured in the present study. Mental health has been measured in this

study as the presence of positive indicators such as positive affect, emotional ties and the absence of negative indicators such as excessive anxiety symptoms, depression and loss of behavioural control. The positive indicators measure psychological well-being, while negative indicators measure psychological distress. Psychological well-being and psychological distress were used as the global measurement scales for mental health (Veit & Ware, 1983).

1.2.3. Hope

Hope is defined by Snyder et al. (1991) as goal-directed thinking in which a person expresses intent to achieve certain goals accompanied by the necessary motivation and possible pathways for attaining those goals. It has also been described as a cognitive-motivational state involving the creation of goals, pathways and a sense of agency (Snyder, 1994; Rand & Cheavens, 2009). Literature evidence suggests that there is a correlation between hope and physical health (Irving, Snyder, & Crowson, 1998), hope and psychological adjustment (Snyder et al., 1991), and also between hope and academic success (Marques et al., 2011). Hope, according to Snyder (2002), provides a broader explanatory base compared to similar constructs such as optimism (Scheier & Carver, 1985) and self-efficacy (Bandura, 1982).

The theoretical rationale for the link between hope and well-being lies in the fact that hope provides emotional stability and a course of action that could positively influence mental health (Davis, 2005; Dufault & Martocchio, 1985; Muyskens, 1979). It is against this background that the author chose to study hope as a positive experience that might be related to mental health. Hope in the current dissertation was measured as the presence of trust and confidence, positive future orientation, social relations and the absence of a lack of perspective (Schrank, Woppmann, Sibitz, & Lauber, 2011).

1.2.4. Perceived social support

Perceived social support refers to a person's "cognitive appraisal of his or her social support as being reliable and well connected to others" (Barrera, 1986, p. 5). It also refers to the belief that help would be available when needed (Norris & Kaniasty, 1996). Social support is a construct with a number of dimensions, including enacted, received and perceived social support (Barrera, 1986; Xia et al., 2012). Enacted support and received support usually refers to actual support networks in place, while perceived social support is an evaluation or cognitive appraisal of the availability of support (Barrera, 1986; Xia et al., 2012). Perceived social support tends to be based on previously enacted and received social support. In addition, research in this area provides evidence for the existence of different sources of support including family, peers and the community (Tardy, 1985; Zimet, Dahlem, Zimet, & Farley, 1988).

Compared to support received, perceptions of support has been consistently linked to the promotion of mental health (Norris & Kaniasty, 1996). Norris and Kaniasty (1996) noted that received support could be inappropriate and also threaten the individual's self-esteem. It is for this reason that perceived social support and its role in enhancing psychological well-being and reducing psychological distress is assessed in the current study. Perceived social support in the present study explores an individual's evaluation of the availability and adequacy of support from family, friends and significant others (Tardy, 1985; Zimet et al., 1988).

1.2.5. Life satisfaction

Global life satisfaction has been referred to as a cognitive appraisal of the overall quality of an individual's life compared to laid down standards (Diener, Suh, Lucas, & Smith, 1999; Pavot, Diener, Colvin, & Sandvik, 1991). Life satisfaction falls under research concerned with subjective well-being (SWB), and is currently one of the main focusses of

positive psychological research. This construct is described as the cognitive component of subjective well-being alongside the affective component that pertains to emotions and affect (Diener, 2009). Relatedly, Pavot and Diener (1993) noted that the affective and cognitive components of SWB although not totally independent are distinct from each other.

There is evidence showing that life satisfaction could be regarded as either a uni-dimensional construct (Diener, Emmons, Larsen, & Griffin, 1985) or multidimensional construct with different domains (Huebner, 1994). Some authors have argued that uni-dimensional measures of life satisfaction would result in the loss of valuable information about well-being (Huppert & So, 2013). In a similar vein, other authors have identified life satisfaction as a multidimensional construct that acts as a key indicator of mental health (Gilman & Huebner, 1997, 2003, 2006; Huebner, 1994; Keyes, 2003). The multidimensional nature of this construct allows it to tap into an individuals' evaluation of various aspects of their lives. It is for this reason that current study examines possible relationships between several aspects of mental health and different domains of satisfaction. The dimensions that were measured in this study include family, friends, school, living environment and self (Huebner, 1994).

1.3. Adolescence, Mental Health Promotion and the Discourse of Positive Psychology

The focus of this section is to provide a background, which comprises a discussion of the period of adolescence in relation to mental health, the progress of mental health promotion research and the discourse of positive psychology. This discussion would also include the gaps in research and the relevance of positive psychology for understanding adolescent mental health.

1.3.1. Adolescence and mental health

Adolescence is a transitional period during which individuals experience a number of changes, including physiological, emotional, social and economic determination (Adams, 1968; Crockett & Crouter, 2014). Adams (1968) suggests that adolescence is a period of total development that includes feelings of autonomy and a reduced amount of familial supervision. Moreover, adolescents have to manage the contradictions emerging from the need for autonomy and the continuous presence of parental control in order to ensure a successful navigation through this crucial phase of life (Adams, 1968). Researchers interested in the period of adolescence tend to focus on the life changes, new developments and how adolescents navigate through these changes in the presence of familial and social influence (Crockett & Crouter, 2014; Larson, 2000). The changes encountered at this stage provide a good platform for investigating the factors that are essential for well-being.

Alternative views on development have been presented Nsamenang (2006), who noted a need for considering the unique role of the African culture in development. The traditional African perspective on development is based on the notion that human behaviour can be understood in terms of the greater whole (Louw, Louw, & Kail, 2014). In this view, development is regarded as not only biologically determined, but also partly influenced by the ecology, other individuals, spiritual forces and the social system in which development occurs (Louw et al., 2014; Nsamenang, 2006). Development is also described as the process of growing physically, cognitively, socially and emotionally to the point of being able to effectively engage with family and society (Nsamenang, 2005). The phrase “*social ontogenesis*” has been advanced by Nsamenang (1992) in explaining human development as a function of social factors, including values, cooperation, interdependence and communal responsibility (Louw et al., 2014; Nsamenang, 1992). Nsamenang (1992) further proposes three phases of human development, which have emerged from the traditional African

perspective. These phases include the spiritual selfhood (from conception to birth), the social or experiential selfhood (from the introduction of the child into the community until death) and, finally, ancestral selfhood (which continues after death).

The period of social selfhood, which includes the stage of adolescence, has been described as encompassing seven stages (Nsamenang, 1992). These include the period of the new born, social priming, social apprenticing, social entrée, social internment, adulthood, old age and death. Each of these developmental stages have unique tasks, which are defined in the context of the culture (Nsamenang, 2006). Moreover, the sense of selfhood during adolescence is acquired as individuals engage in the cultural life, partake in social roles and assume social responsibility as a form cognitive development. Furthermore, cognitive development is found to unfold when a child is able to capture shared routines and engage in participatory learning (Nsamenang, 2006). This alternative view of development could shed more light on adolescents' development of psychological strengths and how these strengths are related to mental health.

Before the 1970s, adolescence as a topic for research consideration was limited due to a number of reasons (as illustrated in Powers, Hauser, & Kilner, 1989). Firstly, adolescence was considered as a transitional period rather than a period in its own right. Secondly, as a transitional period it was presumed that the emotional disturbances and problems of adolescence would eventually fade away (Powers et al., 1989). Furthermore, these problems were assumed to be due to the physical, biological and psychological changes experienced by individuals in this phase of their lives (Powers et al., 1989). The transitional nature of this stage is reflected in adolescents' anticipation of the future, a sense of regret for previous losses, a need for major psychological readjustment and some uncertainty regarding their present status (Coleman & Hagell, 2007). However, there is evidence to show that most

adolescents navigate through this stage with little or no major trauma (Coleman & Hagell, 2007; Dahl, 2011; Gardner & Steinberg, 2012).

Despite the challenges that face adolescents, these young people are also at a stage in their life that offers opportunity for growth. Currently, research shows a slow but gradual shift from the perspective that considers adolescence as a time of excessive stress.

Accordingly, emerging views are now focussing on the opportunity for development that occurs at this stage, and development generally has a positive connotation (Larson, 2000).

Although this platform for development also exposes adolescents to precarious conditions that could have adverse mental, behavioural and physical consequences, it does not strip them of their potential for growth (Kazdin, 1993). This potential for growth, as already indicated, has provided the impetus for this study. Given that the period of adolescence provides a window of opportunity to build on their strengths, the current study is therefore concerned with exploring some psychological strengths and positive experiences that could be pertinent for mental health.

Previous research has established that many mental health problems have their first onset in late childhood or early adolescence, with depression being the highest cause for disability-adjusted life years (DALY) in young people (Kessler, Avenevoli, Costello, & et al., 2012; “WHO | Adolescents and mental health,” n.d.). There is also evidence demonstrating that proper development during adolescence results in improved mental health outcomes and the reduced likelihood of the occurrence of mental disorders (“WHO | Adolescents and mental health,” n.d.). Furthermore, the building of strengths and positive attributes in adolescents, such as social skills, problem-solving skills and self-confidence, has the potential to pave the way for mental health and prevent mental health problems such as anxiety and depression (“WHO | Adolescents and mental health,” n.d.).

In order to appreciate the importance of research on positive attributes and psychological strengths among adolescents, it is necessary to highlight the general prevalence of mental ill-health among this population. It must, however, be noted that there are no regular surveys on the prevalence of mental disorders among adolescents (WHO, 2014). It has been found that one in five children and adolescents are likely to suffer from one mental disorder or another (Kleintjes, Lund, & Flisher, 2010), with additional evidence indicating that mental health problems tend to affect 10-20% adolescents worldwide (Kieling et al., 2011). Research has also demonstrated that the access to mental health facilities by adolescents in low- and middle-income countries is scarce (Morris et al., 2011). Noteworthy is the prevalence of mental health problems despite advances in cure and prevention, which provides some evidence on the need for alternative approaches in mental health.

A recent synthesis of international data on adolescent health showed that there is a growing risk of mortality from non-communicable diseases such as mental illness, overweight, substance abuse and physical inactivity, even in sub-Saharan Africa (Patton et al., 2012). This shift in risk factors raises important concerns for adolescent mental health. Within the context of sub-Saharan Africa, Petersen, Bhana, and Swartz (2012) argued that, given the presence of poverty in this region, it is quite easy for policymakers to overlook mental health issues. In order to address this challenge, they argue that there is evidence showing that interventions aimed at promoting positive mental health outcomes, within the context of risk, are beneficial in the long run in breaking the cycle of poverty (Petersen et al., 2012).

In the African region, insignificant attention has been paid to adolescent mental health (Faydi et al., 2011; Jenkins et al., 2010). Despite emerging evidence showing that mental disorders can have a negative influence on educational attainment (Myer et al., 2009), there are still relatively few studies focussing on mental health. The recurring themes within

adolescent health research in sub-Saharan Africa still include a focus on risky sexual behaviours (Dimbuene & Defo, 2011), HIV prevention (Onokerhoraye & Maticka-Tyndale, 2012), and overweight (Peltzer & Pengpid, 2011). The paucity of research on mental health and a skewed focus on sexual behaviours, HIV, overweight calls for a renewed interest in mental health since it plays an equally important role in the well-being of adolescents.

Given the importance of mental health for the general well-being of the adolescent and for their successful functioning and transitioning to adulthood (Petersen, 2010; WHO, 2011), research exploring the aspects of mental health is necessary. Furthermore, knowledge about aspects of mental health would provide adolescents with the opportunity to cope with the stresses of this stage and enable them to make life choices that would be beneficial for both the individual and community. The presence of relatively fewer studies on positive mental health among adolescents compared to research on adult mental health has also provided the impetus for this study. Additionally, the increased risk of mental-illness and its multiplier effect in other domains of the adolescents' life makes research in this area (aspects of mental health) not only timely, but necessary.

1.3.2. Mental health promotion

Against the backdrop of the importance of positive mental health for adolescent development both in the present and future, in the following paragraphs, the author locates the focus of the current dissertation in mental health promotion and positive psychology. Mental health promotion (henceforth to be referred to as MHP) is concerned with efforts directed at improving mental health. Mental health promotion emphasises positive human attributes and the enhancement of mental health indicators in order to improve well-being and also reduce the burden of mental ill-health (Jane-Llopis, Barry, Hosman, & Patel, 2005; Kobau et al., 2011).

Globally, there is an increase in the concern for MHP as a response to the state of mental health. The WHO, the National Research Council, the Institute of Medicine and other agencies have called for greater effort in the area of MHP (Lund, Boyce, Flisher, Kafaar, & Dawes, 2009; Power, 2010; Pratap, Itzhak, Sylvie, Andres, & Saxena, 2007). Arguments for the need for MHP includes the high cost of mental health care and the prolonged human suffering associated with most psychological disorders (Power, 2010).

Despite the evidence for the benefits of exploring positive aspects of mental health, a review of the literature on MHP reveals that research has been conducted mainly in the global north compared to the global south. Some of these studies in the global north have focussed on the physical, social and human resources for MHP (for example, Puolakka, Kiikkala, Haapasalo-Pesu, & Paavilainen, 2011). Other studies have encouraged building individual strength such as self-esteem (Moshki, Amiri, & Khosravan, 2012), fostering family and community resilience and removing barriers that prevent people from taking control of their mental health (Kalra et al., 2012; Power, 2010; Pratap et al., 2007). Other examples of environmental factors for MHP include the need to train MHP professionals with adequate skills in the implementation and evaluation of MHP (Greacen et al., 2012; Reupert, Mchugh, Maybery, & Mitchell, 2012). An example of such training may be how to implement a psychoeducational programme on the practice of good social skills for children.

It is worth reiterating that, while Puolakka and associates (2011) emphasise environmental factors for MHP, there is also research evidence that points to personal or internal factors such as self-esteem, resilience, hope and life satisfaction. These factors are innate abilities and capacities of a person that can be improved in order to promote mental health. For example, Moshki et al. (2012) found that implementing an education programme on self-esteem and health beliefs had a significant influence on mental health three months after the experiment. In other words, a boost in self-esteem encouraged the medical students

to feel that they had better control over their health and this, in turn, enhanced their mental health. Both external conditions (developing human resources and providing favourable learning environments) and internal factors (such as self-esteem) can be said to be necessary in MHP. The current study explores both internal and external resources pertinent for adolescent well-being.

Further evidence from the global front also comes with Kalra et al. (2012) and they emphasise a universal approach to MHP. This approach is focussed on enabling individuals improve their important areas of functioning. An example of research on some important areas of functioning is the current focus on psychological strengths such as gratitude, kindness, love, empathy and forgiveness (Peterson, 2006). Additionally, other scholarly work have focussed on the positive aspects of mental health, among adolescents, which include hope as a psychological strength (Snyder, Lopez, Shorey, Rand, & Feldman, 2003), the psychological consequences of high levels of life satisfaction (Suldo & Huebner, 2006), and the relationships between the perception of social support and mental health (Hefner & Eisenberg, 2009).

Generally, it seems that South Africa has made some progress in research on MHP compared to other African countries (Patel, Flisher, Hetrick, & McGorry, 2007; Petersen et al., 2012). Research trends in South Africa include an emphasis on sensitive parenting, the provision of educational opportunities, the building of resilience and psychological autonomy, and these have all been identified as protective factors in child and adolescent mental health (Patel et al., 2007; Petersen et al., 2012). Furthermore, important developmentally-timed MHP programmes, such as building life skills and enhancing peer group opportunities, have also been recommended as being necessary in mental health promotion among adolescents (Petersen, Swartz, Bhana, & Flisher, 2010). Although the literature on MHP in South Africa focusses on positive attributes, reference to the negative

aspects of human experiences are not completely ignored (Patel et al., 2007; Petersen et al., 2012). In Ghana, current studies have focussed on the rehabilitation and cure of mental illness with limited funding being allocated to mental health research (Cohen et al., 2012; De Menil et al., 2012; Jenkins et al., 2010; Raja, Wood, Menil, & Mannarath, 2010). Consequently, MHP has been given less priority.

Notable, is the link between MHP and positive psychology insofar as improving positive psychological factors (internal factors) enhance mental health. The current dissertation focusses on providing evidence of the relationships between certain internal factors (hope, perceived social support and life satisfaction) and psychological well-being as well as psychological distress. Such evidence could form the basis for MHP among adolescents in the Northern part of Ghana.

1.3.3. Discourses of positive psychology and mental health

The enterprise of psychology has been orientated towards pathology, with most of the breakthroughs in research and practice being in the area of prevention and cure (Lopez & Gallagher, 2009). The reintroduction and renewed interest in positive psychology, seems like a promising approach in the midst of the focus on disease and all that is wrong about human nature (Seligman & Csikszentmihalyi, 2000). Moreover, positive psychology and its basic tenets are not new ideas, as is clear from a quick reflection on the works of famous authors such as Abraham Maslow (Maslow, 1954) and other humanistic theorists. The discourse of positive psychology is a reawakening of a paradigm that considers the positive attributes of a person as necessary to his or her development. This paradigm incorporates the need for cure, preventive, palliative and rehabilitation services with the need to also build on inherent strengths and capacities (Linley & Joseph, 2004). In a similar vein, Linley, Joseph, Maltby, Harrington, and Wood (2009) present a review of how the tenets of positive psychology

could be merged with other branches of psychology, indicating that the aims of positive psychology are not different from those of other branches of psychology.

Compared to the West, sub-Saharan Africa is lagging behind in accepting and working with a definition of mental health that prioritises optimal functioning (Faydi et al., 2011; Patel et al., 2007). Within the practice of MHP, South Africa has made some strides, including the application of the positive psychological paradigm in mental health research (see Coetzee and Viviers (2007) for a review). A notable achievement is the theory of fortigenesis advanced by Strümpfer (1995) (to be discussed in depth in Section 2.3.3).

Research on positive psychology has also been extended to adolescent mental health (Kirschman, Johnson, Bender, & Roberts, 2009). In this regard, it has been noted that it is necessary to consider the unique context of childhood and adolescence when applying theories of mental health. Kirschman et al. (2009) also noted that there is empirical evidence on the importance of studying positive assets in the developmental process rather than deficits. As highlighted in the problem statement, development and health share a positive connotation, hence necessitating research that emphasises positive attributes. Larson (2000) and Petersen et al. (2012) argue for the need to encourage positive youth development and engagement in MHP research that would enhance the mental health of adolescents. The current study focusses on factors that research has shown to be important for positive development among adolescents. Given that the context of the study is Ghana, a brief review of mental health research and mental health care will follow in the next section.

1.4. The Ghanaian Context

A review of research and practice in mental health shows that, while social science research is starting to emerge on aspects of mental health in Ghana, scholarly work in this field of study still relatively lags behind. For example, the Mental Health Bill in Ghana aimed at ensuring the incorporation of mental health into primary health care and a progressive

legislation for mental health care was only recently passed in 2012 (De Menil et al., 2012). Despite this, mental health care is still being dominated by psychiatric care, which is already over-burdened with caseloads of patients in need of treatment (Read & Doku, 2012). Although it is a mental health bill, priority is currently given to mental illness, with a negligible focus on psychological well-being.

In 2006, there were approximately four actively working psychiatrists, four psychologists, 169 community psychiatric nurses (CPN) and four social workers who were employed in the mental health sector by the Ghana Health Service (GHS; Osei, Saweka, Twum-Barima, Agossou, & Funk, 2007). The CPNs were largely responsible for psychiatric care in the country, with a number of them working in private psychiatric care such as the Pankronu and Santasi psychiatric hospitals (Osei et al., 2007). Although the CPNs are supposed to be spread all over the country, three quarters of them are found in the country's three psychiatric hospitals, which are located in the capital, Accra (Doku et al., 2011). This disparity has resulted in inequitable access to mental health services in the country. The drafting of a new mental health bill has been accompanied by increased training of psychiatrists and primary health-care specialists in mental health (Read & Doku, 2012). As a result, the number of psychiatrists has increased slightly to 18 psychiatrists. There is also a recent country-wide distribution of clinical psychologists to major hospitals, approximately 30 of them as at 2013 (Kpobi, Osei, & Ohene, 2013).

The three state psychiatric hospitals, namely Accra Psychiatric Hospital, Pantang Hospital and Ankafu Psychiatric Hospital, are all located in the central parts of the country. These hospitals provide specialised psychiatric care with relatively less government funding for primary health care-based services ("WHO | Ghana," n.d.). Relatedly, there is a predominant use of psychotropic medicine for the in-patient treatment of mental disorders, accompanied by long patient stays (Ofori-Atta, Read, Lund, & MHaPP Research Programme

Consortium, 2010). It is also interesting to note that only a few resources are being invested in psychosocial care and counselling (Jack, Canavan, Ofori-Atta, Taylor, & Bradley, 2013). Generally, the research evidence on mental health is heavily focussed on psychiatric care, with mental health promotion being minimal.

Statistics on mental health in Ghana, in this instance mental illness, indicate that mental illness forms 9% of the burden of disease in the country. Women have been found to be more susceptible to psychological distress compared to men (Sipsma et al., 2013). Mental health professionals have also been stigmatised, with studies showing that there is a preponderance of negative attitudes towards these professionals (Adewuya & Oguntade, 2007). It is also not uncommon to find individuals with mental illness preferring to consult with traditional healers and pastors (Appiah-Poku, Laugharne, Mensah, Osei, & Burns, 2004). This is because there is still a tendency for individuals in Ghana to attribute mental illness to spiritual causes. As a result of the stigma and the tendency for individuals with mental illness to consult with spiritual healers, there is limited information on the actual prevalence of mental illness in the country.

There is a call for increased efforts in the country to ensure that people living in the rural areas can also get access to mental health care. Some of the recommendations that have been made include strengthening community-based care, increasing the number of CPNs all over the country, and using psychiatric facilities mainly for referral cases (Akpalu et al., 2010). In order to strengthen community-based care, some authors have suggested that state psychiatric institutions might need to collaborate with traditional healers in the community (Ae-Ngibise et al., 2010). A non-governmental organisation (NGO), Basic Needs, has made recognisable strides in collaborating with traditional healers and providing mental health care (Ae-Ngibise et al., 2010). In addition to managing successful collaboration between traditional healers and mental health service providers, Basic Needs has also harnessed the

efforts of self-help groups to promote the rehabilitation of previously mentally-ill patients (Cohen et al., 2012). However, no mention was made of mental health promotion especially for the adolescent group of the country. Moreover, these efforts although worthwhile, tend to be directed at alleviating symptoms and not improving mental health. An exception to this trend is a qualitative study exploring the meanings of well-being among Ghanaian adolescents (Glozah, 2015). The author found that daily functioning was an important conceptualisation of well-being among their sample of study. This finding reflects positive states associated with mental health.

One major hindrance to the advancement of mental health care in Ghana, which is true of almost all countries on the continent (Faydi et al., 2011; Raja et al., 2010), is limited resources. Moreover, as a result of the absence of a mental health budget in Ghana, psychiatric hospitals are forced to rely mostly on donor agencies to supply them with psychotropic medicines (Raja et al., 2010). The limitation of the psychiatric systems points to a need for a complimentary approach towards mental health, particularly a positive approach to mental health.

Although adolescence is generally recognised as an important period in life, sparse research has been conducted on adolescent mental health in Ghana (Kleintjes et al., 2010). This neglect might be the result of some of the reasons highlighted earlier in the problem statement. A review by Kleintjes et al. (2010) showed that Ghana's mental health policy did not include policies that exclusively addressed child and adolescent mental health. In addition, the authors found that the current policies were not in line with contemporary issues on mental health care. Current issues in adolescent mental health that were omitted in the national mental health policy included age-specific mental health services and policies addressing improvement in the quality of caregivers. Furthermore, the prevention of delays in emotional and intellectual development and the introduction of life skills education in schools

were not adequately addressed in the mental health policy (Kleintjes et al., 2010). All the above mentioned issues require efforts in MHP and evidence of what constitute important aspects of positive mental health in Ghana. The dearth of positive psychological research within the Ghanaian context provides fewer opportunities for understanding and facilitating the promotion of psychological well-being and the reduction of psychological distress.

The Ghana Health Service (2012) has advocated for programmes that promote adolescent health and development. Included in this agenda is the need for a strategy to improve adolescent mental health. In spite of the fact that adolescent mental health was cited as being important, no specific strategies were established for the improvement of the mental health of young people. Compared to issues relating to physical health, including teenage pregnancy and engaging in unprotected sex (Kumi-Kyereme, Awusabo-Asare, Biddlecom, & Tanle, 2007) mental health seems to have received insignificant attention.

An exception to the neglect of adolescent mental health is the current interest in bullying in senior high schools in Ghana, specifically, with regards to how victimisation through bullying may affect psychological health. Some of the impacts of bullying include suicidal ideation, feelings of depression and generalised anxiety disorders (Owusu et al., 2011). A recent study by Cole et al. (2014) revealed that academic stress was positively related to anxiety and depression among college students in Ghana. Of interest to note was the partial mediation of positive psychology variables such as ego resilience and mindfulness in the relationship between academic stress and psychological health. These variables lowered the impact of academic stress on the psychological health of the study participants. Additionally, Glozah and Pevalin (2014) noted that adolescent health and well-being was intricately tied to academic success. They further intimated that psychosocial factors such as social support and stress had significant impacts on the adolescents' psychological health (Glozah, 2015; Glozah & Pevalin, 2014). It is worth reiterating that, compared to adult

mental health, adolescent mental health has been presented with more research gaps. The current research trends among adolescents, which relates primarily to their physical health, although important in its own right, is inextricably tied to mental health (Prince et al., 2007). This is because adolescents are more likely to make better decisions regarding their physical health when they are experiencing optimal mental health.

In summary, mental health practice and research in Ghana is currently concerned with pathology and curative services and there is a gap in research on positive mental health. Following this “mental health” in the Ghanaian context seems to connote both mental illness and the absence of it, primarily because of the focus on cure and prevention. Furthermore, research demonstrating the conceptualisation of mental health as a state of well-being as well as its promotion is limited in the Ghanaian context. Accordingly, a lack of understanding of mental health as a positive state, and its probable influence on preventing mental illness, might account for this gap in research and practice. The current study seeks to fill up some of the research gap in this area.

1.5. Rationale

The current dissertation focusses on aspects of mental health that the literature has demonstrated to be particularly important for MHP among adolescents and adults alike. Given the importance of the period of adolescence for later mental health development (Larson, 2000; Patel et al., 2007; Stormshak et al., 2011; Sun & Shek, 2010) and the absence of research on the positive psychological factors associated with mental health in the Northern region of Ghana, it has become necessary for research to focus on this under-studied area of psychology.

The Northern region of Ghana, which is the context of the study, is generally lagging behind in the area of infrastructural development. The region has few amenities, presents with under-staffed hospitals and poor learning environments that tend to detrimentally affect

health (“Ghana Northern Region,” n.d.). It is one of the farming regions in Ghana, with a high number of out-migrants moving to the big cities to find work under harsh social conditions (Awumbila & Ardayfio-Schandorf, 2008; Bull, Duah-Owusu, & Autry Andvik, 2010; Wilson & Mittelmark, 2013; Yeboah, 2010). Women from the Northern region are faced with psychosocial challenges such as poverty and constant loss of close kin due to diseases (Andvik, 2010; Bull et al., 2010). Additionally, school-going children and adolescents in impoverished contexts in Ghana have been found to encounter a range of obstacles. These include limited economic resources, long walking distances between home and school, gender disparities in access in education, low value for western education and poorly equipped learning environments (Fentiman, Hall, & Bundy, 1999). Despite these challenges, MHP programs and research modelled after the bio-medical paradigm seemed to be among the few existing interventions directed at improving mental health (Cohen et al., 2012). Furthermore, most of these programs were neither targeted at adolescents nor based on the positive psychological paradigm resulting in limited information on aspects of mental health. Thus the study aims to

1. Determine the nature of relationships between hope, perceived social support, life satisfaction and mental health.
2. Determine how school-going adolescents’ experiences of hope, social support and life satisfaction were engendered as well as the generalised resistant resources for coping and maintaining well-being.

The present study’s focus on individual strengths and resources within the Ghanaian society would provide a new perspective on the experience of some aspects of mental health among the adolescent population. The current study would also provide a developmental perspective on the aspects of mental health including hope, perceived social support and life satisfaction among school-going adolescents in the Northern region of Ghana.

The findings of the current study would also have implications for policy. A noteworthy policy implication is that the present study would provide evidence that could propel the GHS and Ministry of Education to pay greater attention to the psychosocial factors affecting mental health. Such evidence is necessary because research has established that greater psychological well-being is necessary for academic success (Cole et al., 2014), which is the major goal of school-going adolescents. Other possible policy decisions could include incorporating psycho-educational and life skills programs targeted at building hope, social support and life satisfaction into the school curriculum.

1.6. Scope of the Study

The current study, although aimed at exploring mental health, is limited in its scope. Geographically, this study is limited to the Ghanaian context and the study area is confined to the Northern region of Ghana. Furthermore, mental health is a broad concept that can be studied from a number of perspectives, but this study is limited to exploring specific positive psychological variables (hope, perceived social support and life satisfaction) that research has shown to contribute to mental health. In the literature review, result and discussion chapters, a determination will be made of the nature of the relationships between these variables and mental health (measured as psychological well-being and psychological distress). The data on the structural relations would be accompanied by an in-depth exploration of how hope, perceived social support and life satisfaction are conceptualised and engendered among school-going adolescents. Other resources for coping would also be explored.

1.7. Chapter Outline

The current dissertation consists of six chapters. The second chapter is a review of the literature on the aspects of mental health particular to this study (hope, perceived social support and life satisfaction) and the theoretical perspectives that have informed this study, which include Seligman's (2011) theory of well-being, salutogenesis, fortigenesis and the

ecological systems theory of human development. The third chapter is a detailed description of the methodological considerations and procedures, as well as the philosophical assumptions underlying the choice of methods. The fourth chapter comprises the results of analysis of both the quantitative and qualitative data. The fifth chapter comprises the discussion and the summation of findings. The last and final chapter is a conclusion of the dissertation with some statements on the implications and limitations of the study.

Chapter 2: Literature Review and Theoretical Frameworks

This chapter comprises a detailed presentation of empirical studies and theoretical frameworks that have been advanced in the understanding of aspects of mental health. The chapter begins with a review of relevant international and African literature on hope, perceived social support and life satisfaction. This is followed by an outline of the research questions based on the reviewed literature. This chapter concludes with locating the current study within appropriate theoretical frameworks.

Two major theoretical frameworks- salutogenesis and the ecological theory of development have guided the present study. The theory of fortigenesis, which is closely related to salutogenesis and Seligman's (2011) well-being theory would also be discussed briefly. The theory of hope by Snyder would be discussed separately under the review of literature on hope since it explains only this construct.

2.1. Literature Review

2.1.1. Mental health: psychological well-being and psychological distress

As indicated in the introductory sections, research on the positive aspects of mental health has been concentrated in the West. There also seems to be some consensus in the literature on the benefits of studying positive mental health, especially for the development of adolescents. However, there is relatively less research evidence from sub-Saharan Africa. Mental health is a broad construct and it would be impossible to carefully review every aspect of the literature in one dissertation. It is also important to note that although the present study makes reference to authors that have described mental health mainly as a positive state; this construct, in the current study, is described as the absence of negative symptoms and the presence of positive states.

There is a general consensus within the positive psychology tradition on the bi-dimensionality of the construct of mental health (Diener, 2009; Diener & Chan, 2011; Keyes,

2003; Keyes & Simoes, 2012). For example, Keyes and Simoes (2012) explain that mental health is currently being understood under the rubric of subjective well-being or an individual's evaluation of the quality of his/her life, and this is different from the negative experience of psychological distress. The continuum measuring mental health has been classified into languishing, moderate and flourishing mental health (see Figure 2.1) (Keyes, 2005, 2007). Additionally, Keyes (2007) presented a 13-dimension scale that could be adopted in determining whether an individual was experiencing flourishing mental health. Low levels in the domains measured by the 13-dimension scale were responsible for languishing mental health, and this should be considered as not completely synonymous with mental illness (Keyes, 2007). Figure 2.1 below illustrates a diagram showing the mental health continuum as conceptualised by Keyes.

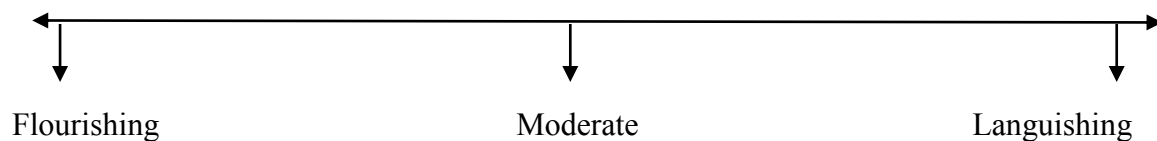


Figure 2.1. Mental Health Continuum (Keyes, 2007)

The basis for Keyes's argument on the importance of flourishing mental health is underpinned in his consideration of the various evolutions in the conceptions of health. According to Keyes (2007) there have been three major evolutions in the conceptions of health, namely, pathogenesis, salutogenesis and finally, the complete state model, which Keyes argues is the prerequisite for true population health. Keyes (2007) highlighted that there were some inherent problems associated with the pathogenic approach. This included an increased life expectancy but with poor health, high cost of health care and a surge in the prevalence rates of mental disorders with a number of chronic cases. The problems with the pathogenic model have necessitated a review in the conception of mental health. Keyes

(2007) therefore suggests a complete state model, where in the focus is on experiencing flourishing mental health that protects the individual from the problems of the pathogenic approach.

Mental health, for the purpose of the current study, is referred to as psychological well-being, and it has been defined to include feeling good (positive emotions) and functioning well in life (eudemonia; Keyes, 2003, 2007; Keyes & Simoes, 2012). Positive emotions include affect, happiness and life satisfaction, while positive functioning ranges from personal growth, purpose in life, positive relations with others to social integration and coherence as shown in the Table below 2.1 (Keyes, 2003). A detailed explanation of each of the components presented in the Table 2.1 has not been provided, because only three of these components – positive affect, life satisfaction, and– emotional ties pertain to how psychological well-being was measured in the current study.

Table 2.1

Components of Flourishing Mental Health (Keyes, 2003)

Positive feelings: emotional well-being	Positive functioning: psychological well-being	Positive functioning: social well-being
Positive affect	Self-acceptance	Social contribution
Happiness	Personal growth	Social coherence
Life satisfaction	Purpose in life	Social integration
	Environmental mastery	
	Autonomy	
	Positive relations with others	

Based on data from the Midlife Development (MIDUS) national probability sample, the components of mental health in Table 2.1 have been found to be good predictors of all-

cause mortality among American adults (Keyes & Simoes, 2012). Further evidence has revealed that aspects of flourishing mental health or psychological well-being (as shown in the table above) is also negatively related to mental disorders, specifically suicidal behaviour and academic impairment among college students in America (Keyes et al., 2012).

Accordingly, suicidal behaviour and academic impairment were therefore less likely to occur among college students with flourishing mental health compared to those with moderate and languishing mental health. The focus on college students points to the relevance of flourishing mental health for the youth. Similar evidence emerged from a study in South Africa, where flourishing Setswana adults were found to have lowered levels of psychopathology (Keyes et al., 2008).

Furthermore, Keyes et al. (2012) noted that it is not impossible for an individual to have flourishing mental health and still have an incidence of mental illness. Nonetheless, those with languishing mental health were more likely to suffer a mental disorder compared to those with flourishing mental health. The results of Keyes's study revealed that those without mental disorders did not equal the prevalence of those who matched the criteria for flourishing mental health, indicating a two-continua model of mental health (Keyes et al., 2012). This finding provided a rationale for the author's decision to measure psychological well-being separately from psychological distress. It would seem that Keyes limited his explanation of mental health to psychological well-being and left the description of psychological distress to the DSM-5 (American Psychiatric Association, 2013).

Psychological distress, which would be placed on the continuum of mental ill-health, could then be described to include the symptoms presented by the DSM-5 (American Psychiatric Association, 2013). Some of these include disruptive mood dysregulation disorders, eating disorders, gender dysphoria, social anxiety disorders and intellectual disability.

Apart from predicting psychological distresses such as suicidal behaviour and academic impairment, changes in psychological well-being have also been found to be predictive of future risk for mental illness (Keyes, Dhingra, & Simoes, 2010). Adults in the USA who were languishing during the first wave (1995) and the second wave (2005) of data collection were more likely to have had a mental illness in 2005 compared to those who were flourishing (Keyes et al., 2010). Comparatively, adults who improved from languishing in 1995 to moderate mental health in 2005 were less likely to have a mental disorder. Gains in mental health, according to Keyes et al. (2010), increased the odds of the incidence of flourishing mental health. These findings provide support and evidence for investing in mental health promotion (MHP) with the aim of improving population health. Just as current mental illness is a predictor of future mental illness, moderate and languishing mental health has also been found to be predictors of future mental illness (Keyes et al., 2010). The stability of flourishing mental health across a number of years makes it worthwhile for researchers to focus on its enhancement rather than an exclusive emphasis on reduction of the incidence of mental illness. In support of the findings by Keyes et al. (2012), a study of a sample of South Australian adults demonstrated that psychological well-being and psychological distress are not exactly at different ends of the continuum, however, they could be related depending on the predictor and contextual variables influencing each construct (Winefield, Gill, Taylor, & Pilkington, 2012).

The model of mental health suggested by Keyes has been tested in representative samples in the United States of America (USA) (Keyes et al., 2012) and South Africa (Keyes et al., 2008; Nell, de Crom, Coetzee, & van Eeden, 2015). Despite evidence for the usefulness of this model outside the USA, evidence for its applicability outside the West has been limited. The review presented above delineates some notable findings on general aspects of flourishing mental health, in the case of the present study, psychological well-being, and its

relationship with different forms of psychological distress. It is worth reiterating that the present study does not include all the components of flourishing mental health, but is limited to positive affect, emotional ties and life satisfaction. Life satisfaction, as an indicator of psychological well-being, was not removed from the outcome variable because it was interesting to ascertain, whether the uni-dimensional construct was statistically similar to the domain-specific measurements of life satisfaction. It was also interesting to discover whether satisfaction with specific domains of life was predictive of the latent construct, measuring other aspects of psychological well-being, which included a uni-dimensional measure of satisfaction with life. The indicators of psychological distress measured in the present study were limited to anxiety, depression and loss of behavioural and emotional control.

Hope, perceived social support and life satisfaction as aspects of mental health were chosen because they have been identified as positive experiences and there is extant international evidence on their beneficial impact on psychological well-being and the reduction of distress among adolescents in the West (Gilman & Huebner, 2003, 2006; Snyder, 2002; Yarcheski, Mahon, & Yarcheski, 2001). The current study hopes to replicate such evidence in the Ghanaian context, where there is paucity of research. In the following paragraphs the author reviews these constructs (hope, perceived social support and life satisfaction) within the context of research on mental health.

2.1.2. Hope and mental health

2.1.2.1. Hope theory

The theory of hope emerged from the need to understand why people give excuses when they make mistakes and are unable to successfully complete an assignment (Snyder, Higgins, & Stucky, 1983). This resulted in hope being conceptualised as the opposite of the excuse-making process (Snyder, 1989) and this construct was defined as a “positive motivational state that is based on an interactively derived sense of successful (a) agency

(goal-directed energy) and (b) pathways (planning to meet goals)” (Snyder et al., 1991, pp. 570–571). Hopeful thinking was regarded as encompassing a generalised self-evaluation about an individual’s ability to achieve a particular goal (Snyder, 2002). Hope comprises three major components, and these are goals, pathways and agency (all three will be discussed in detail below) (Snyder, 2002). These components combine to make hope a motivational and cognitive phenomenon.

2.1.2.1.1. Goals

One of the essential tenets of the hope theory is that almost all of human behaviour is directed at achieving a certain goal. Goals are regarded as the cognitive component of the hope theory (Rand & Cheavens, 2009; Snyder, 1994) and they provide the endpoint of various thought and behavioural patterns (Snyder, 2002). Goals have been broadly categorised into positive approach goals and negative avoidance goals (Snyder, 2002).

The first category (positive approach goals) involves the initial anticipation of the achievement of a certain desirable outcome or initiating a behavioural sequence to preserve a previously attained positive outcome (Snyder, 2002). An example could be striving to pass an examination and subsequently working hard to maintain the current level of academic achievement. The second broad type (negative avoidance outcome) usually entails averting the occurrence of a negative outcome. In addition to these broad categories there are also highly probabilistic or easily accessible goals and low probabilistic goals. Individuals with high levels of hope were found to stretch or change the rules when they encountered highly probabilistic goals, while low probabilistic goals resulted in individuals finding possible avenues for achieving their goals (Snyder, 2002).

2.1.2.1.2. Pathways thinking

Pathway thinking was grounded in an individual’s ability to conceive a past, present and future. Snyder noted that we do not only envisage life in a unidirectional manner, but also

consider the influence of our past on our future and how our future outcomes also influence the present (Snyder, 2002). Individuals therefore enact behavioural patterns in the present that are targeted at meeting some future goal or need (Rand & Cheavens, 2009; Snyder et al., 2003). A pathway is defined as the strategies developed in order to reach a specified destination (Snyder, 2002). Pathways also refer to generating either a single or multiple routes from a known present to an imagined future (Rand & Cheavens, 2009).

Furthermore, an individual with a high level of hope tends to express some degree of confidence in whatever plausible route they choose during the goal-pursuit process (Snyder, 2002). In addition, individuals with high levels of hope are likely to have alternative pathways, and not only a single pathway, allowing for alternative courses of action in the event that one is faced with an obstacle in the goal-pursuit process (Irving et al., 1998; Snyder, 2002). Apart from alternative pathways there is the possibility of refining the chosen strategy in order to increase the likelihood of a reaching the desired goal (Snyder, 2002).

2.1.2.1.3. Agency

Agency represents the motivational component that enables an individual to commence and affirm the desire for using the chosen pathway (Snyder, 2002). Snyder (2002) calls it a “self-referential mental energy” that enables an individual to persistently pursue identified goals by following the specified routes or pathways. Adolescents in the present sample might have set-goals, probably in academic domains, which were managed with appropriate pathways such as social support. Additionally, adolescents in the current study were able to pursue their goals probably because they have developed the necessary self-referential energy or motivation.

2.1.2.1.4. Full hope model

In order to fully understand the hope theory, two notable propositions by Snyder must be mentioned. The first is the interactive nature of the pathway and agency components of

hope. The second important issue is the role of emotions in hope theory. Snyder et al. (1991) asserted that during the pursuit of goals, there was a repetitive process in which pathway thought and agency thought influenced each other additively and iteratively. This implied that when an individual experienced high levels of pathway thinking, it would influence their perception of their ability and determination to pursue a certain goal and vice versa (Snyder, 2002).

Emotions, in the hope theory, are regarded as one of the outcomes of the goal-pursuit process. A positive outcome during the goal-pursuit process results in an experience of positive emotions and, negative emotions if the opposite happens (Rand & Cheavens, 2009; Snyder, 2002). These negative emotions usually stem from an individual experiencing some form of impediment or stressor during the goal-pursuit process. Individuals with low levels of hope might experience frustration when presented with obstacles and might abandon the entire process. However, those with high levels of hope tend to find alternative routes for the attainment of their goals (Snyder, 2002). Figure 2.2 shows that there are three phases in the goal-pursuit process and these are (1) learning history (2) pre-event (3) event sequence.

Learning history is created when a person's pathway and agency thinking are acquired over time through an individual's childhood, as the child realises that he or she is an independent individual and begins to understand events in a causal manner (Snyder, 2002). In addition, the development of hopeful thinking is accompanied by emotional sets that are fuelled by previous goal attainment or non-attainment.

During the pre-event phase an individual is concerned with evaluating the value of the outcome of pursuing a particular goal. If the outcome of the goal-pursuit is judged to be beneficial enough to require the appropriation of mental efforts, the individual moves on to the event sequence phase (Snyder, 2002). The event sequence involves a reiterative process between possible routes for achieving one's goal and agency thinking in a manner that would

impact the goal-pursuit process positively (Snyder, Rand, & Sigmon, 2002). On completion of a particular goal pursuit, the individual involved evaluates whether his or her goal has been achieved successfully or whether he or she has failed. The resulting emotions (positive or negative) feed back into pathway thought and agency thought regarding that area of the individual's life, and at times life in general (Snyder, 2002). According to Snyder (2002), repeated failures might result in a complete loss of hope in that area of the individual's life.

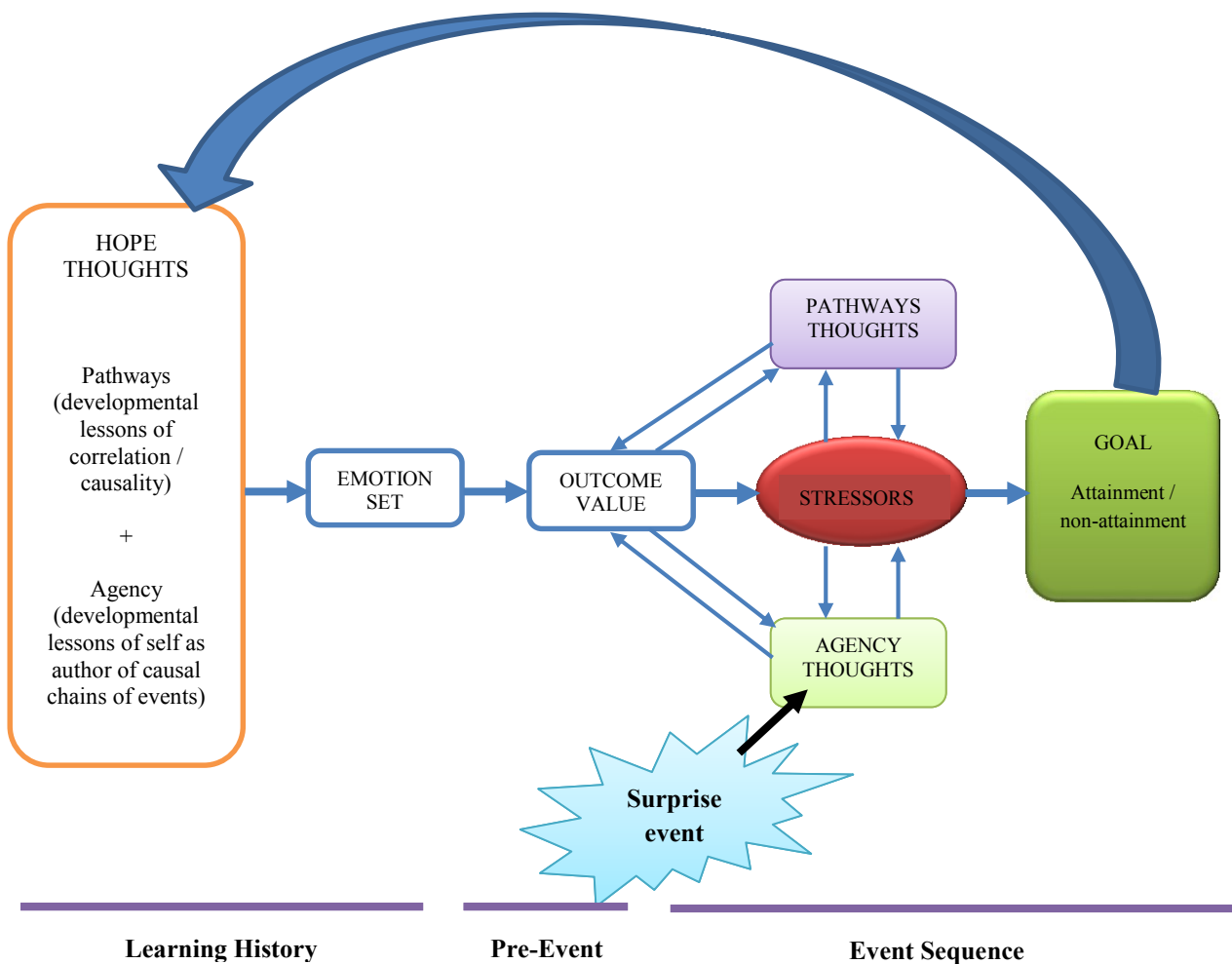


Figure 1.2. Schematic of feed-forward and feedback functions involving agency and pathway goal-directed thoughts in hope theory (Snyder, 2002).

In the next paragraphs, studies focussing on the relationship between hope and life satisfaction, between hope and psychological well-being and between hope and psychological distress will be discussed comprehensively. Considerations would also be given to empirical

evidence that have used qualitative methods in exploring the construct of hope in the African context.

2.1.2.2. Hope and mental health: Empirical evidence

Extant research on hope has demonstrated that this construct influences psychological well-being and offers protection from future stressors (Du, Bernardo, & Yeung, 2015; O'Sullivan, 2011; Rand & Cheavens, 2009; Snyder, 2000). Hope has also been determined to serve as a buffer for adolescents from poor socio-economic backgrounds enabling them to enjoy some level of psychosocial well-being (Guse & Vermaak, 2011). Further evidence in the positive psychological literature revealed that hope was a good predictor of life satisfaction among adolescents and adults alike (Bronk, Hill, Lapsley, Talib, & Finch, 2009). An integrative review of adolescents' experience of hope revealed that a number of antecedents, coincident and consequent variables were closely associated with this construct (Esteves, Scoloveno, Mahat, Yarcheski, & Scoloveno, 2013). These authors opined that antecedent variables such as age and gender provided inconclusive evidence, while consequential variables such as life satisfaction, negative affect, positive affect and academic achievement correlated strongly with adolescent hope. Social support, self-esteem and optimism were also identified as some examples of coincidental variables. The presence of several antecedents, coincidental and consequent variables confirms the importance of hope for many facets of the adolescent life.

It is of interest to note that a number of studies have validated the relationship between the psychological strength of hope and other positive psychological variables such as optimism and self-esteem. However, most of the studies have been correlational in nature making it difficult to draw a causal inference. In addition, there have also been a few inconsistent findings on the extent to which hope predicts mental health. In the same vein, most studies exploring the relationship between hope and psychological well-being have

limited measures of well-being to life satisfaction, resulting in limited evidence on other well-being outcomes such as latent variables comprising positive affect, emotional ties and overall satisfaction with life.

Documented evidence revealed that hope was positively correlated with life satisfaction, psychological adjustment and academic success (Gilman, Dooley, & Florell, 2006). Using the Behavioural Assessment System for Children (BASC), Gilman and colleagues (2006) intimated that adolescents in the USA who had average and high hope scores were more likely to be better adjusted psychologically and report a higher level of global life satisfaction. Students with high levels of hope were discovered to have higher scores on the indicators of psychological adjustment, with lower scores predicting otherwise. One limitation the authors noted was that the sample was quite small, making it difficult to generalise the findings (Gilman et al., 2006).

A similar finding was evident in the longitudinal study of Valle and his colleagues (2006), who noted that hope predicted future life satisfaction among middle and high school students in the USA (Valle, Huebner, & Suldo, 2006). Hope scores at time one was found to predict life satisfaction at time two and also to moderate the effect of stressful life events on internalising behaviours. These authors argued that the ability of hope to predict future life satisfaction provided evidence for its trait-like nature. In addition, individuals with high hope scores were more likely to find adaptive coping strategies to deal with stressful events and have a reduced likelihood of experiencing internalising behaviours (Valle et al., 2006). This finding concurs with Snyder's (2000) conception of hope in the goal-pursuit sequence, and also finds root in Lazarus and Folkman's (1984) conceptualisation of the appraisal of stressors. Accordingly, the secondary appraisal of stressors allows an individual to consider the options for coping, which can be likened to pathway thinking (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984). Hope therefore tends to act as a

psychological strength that provides a type of buffer when faced with negative life events. Additionally, the longitudinal nature of Valle and colleagues' study provided an opportunity for drawing causal inference on the impact of hope on life satisfaction.

An important lesson from Valle and colleagues' study is that it demonstrates a pathway or connection between hope and negative adolescent behavioural outcomes and between hope and life satisfaction, especially in stressful conditions. Moreover, Valle and colleagues advocated for the need to foster programmes that increased the cognitive-motivational aspect of mental health such as hope, among adolescents, in order to assist them in dealing with life stressors (Valle et al., 2006). The current study seeks to explore a similar link between hope and life satisfaction, and between hope and psychological well-being as well as psychological distress. This will be done against the background of stress arising from poverty (Awumbila, Manuh, Quartey, Bosiakoh, & Tagoe, 2011) and other challenges encountered during adolescence. It must be mentioned that although the presence of stressors was not quantitatively measured, it emerged as a crucial theme in the qualitative findings of the study.

The relationship between hope, life satisfaction, mental health and academic achievement was also reiterated in a study by Marques, Lopez, and Pais-Ribeiro (2011) using a sample of Portuguese students. Self-worth was also included and the authors sought to discover whether interventions aimed at building hope would increase an individual's hope level, life satisfaction and mental health. An important contribution of this study was that hope could be taught. Interventions could be developed that would increase adolescents' original level of hope, and such an increase was found to influence other psychological indicators (Marques et al., 2011).

Using a quasi-experiment, which involved the parents and teachers of the intervention group, Marques et al. (2011) found that improved levels of hope after the intervention were

associated with global life satisfaction and increased self-worth, but not with improved mental health. Findings of this study provide inconclusive evidence for MHP but are useful in understanding what positive psychological variables are affected when an adolescent's hope is increased. Of interest to note is that the prerogative of developing hopeful thinking or other psychological strengths does not lie with the individual alone, but also with the modification of the environment (Bronfenbrenner, 1994; Marques et al., 2011). The inclusion of parents and teachers was based on the application of ecological approaches. This approach emphasises the notion that children's hopeful thinking is dependent on learning to trust in the predictability of cause-and-effect interactions with parents. It must be noted that, in Gilman et al. (2006), hope was found to predict academic achievement and behavioural outcomes, whereas in the Marques et al. (2011) study, the findings revealed that hope did not predict academic achievement over time or improved mental health. Further research is required to understand this inconsistency in the literature, since hope has been proven to be an important psychological strength.

Further evidence for the importance of increased levels of hope for mental health comes with Green, Grant, and Rynsaardt (2007) among a sample of Australian female adolescents. According to Green et al. (2007) life coaching that is focussed on a holistic examination of an individual's life can be beneficial in increasing hope levels, cognitive hardiness and reducing depression, anxiety and stress. Life coaching was defined as a collaborative teaching process aimed at enhancing an individual's life experience through self-directed learning among non-clinical populations. After receiving the life coaching, the intervention group which experienced increasing levels of hope and cognitive hardiness also experienced reduced levels of depression (Green et al., 2007). Notable is the impact of increased hope levels on depression in the intervention group. This study provides an example of the use of mental health promotion (MHP) strategies in improving psychological

outcomes rather than focussing only on issues relating only to distress (Green et al., 2007). However, given that the anxiety and stress levels remained the same after the intervention in both groups at time one and time two, further research is needed to explain this finding. Lessons from the qualitative phase of this study might provide contextual information on the factors necessary for engendering hope, which could be incorporated in future interventions, targeted at increasing the hope levels of adolescents in the Northern region of Ghana.

Hope has also been identified as an important variable that shows individual differences in adjustment and coping. In relation to Lazarus and Folkman's (1984) notion that coping was dependent on appraisal (both primary and secondary) of stressful events, Snyder (1994) explained that such appraisal and coping was strongly associated to and dependent on hopeful thinking. This hypothesis was tested by Chang and DeSimone (2001). Using a pathway analysis model, they sought to investigate whether hope affected dysphoria directly and indirectly through the mediation of appraisal and coping among college students from Midwestern University in the USA. These authors revealed that there was a negative correlation between hope, dysphoria and disengaged coping (Chang & DeSimone, 2001). The pathway analysis showed that hope was inversely related to dysphoria through the mediation of secondary appraisal and engaged coping. The authors concluded that individuals with high levels of hope are able to develop effective coping strategies by discovering potential options for coping, thereby leading to positive adjustment (Chang & DeSimone, 2001).

The studies reviewed above demonstrate the relationship between hope and a number of psychological indicators, nonetheless few studies (Ng, Chan, & Lai, 2014; Shorey, Snyder, Yang, & Lewin, 2003) have attempted to test a model showing possible pathways through which these indicators are linked. Furthermore, there seems to be a lack of evidence on the mediated relationship between hope and psychological well-being via life satisfaction. Most studies have considered life satisfaction as an outcome variable but have not considered the

possible mediating role of life satisfaction between hope and other well-being indicators. One of the aims of the current study was to use a method of structural equation modelling (SEM) to test a path model comprising hope, life satisfaction and psychological well-being as well as psychological distress.

Gender differences in the experience of hope and mental health has yielded inconsistent findings (Esteves et al., 2013). For example, Day and Padilla-Walker (2009) found no gender differences in the experience of hope while (Hendricks-Ferguson, 2006) asserted that girls had higher levels of hope than boys. Snyder (2002) did not make any distinction between genders in the experience of hope. The current study adds another dimension to studies comparing gender and hope, by introducing gender as a third variable in the model testing the relationship between hope, life satisfaction, perceived social support, psychological well-being and psychological distress.

Relatively recent evidence explaining the construct hope demonstrate that the traditional theory of hope was quite individualistic to the exclusion of its relational dimensions (Du & King, 2013). These authors posit that in line with Bernardo's (2010, 2014) supposition on the presence of internal and external loci of hope, researchers needed to look beyond the previously outlined individualistic dimensions of this construct. They hypothesised that collectivist cultures such as China would present individuals with both internal and external locus of hope, both of them being important for psychological adjustment (Du & King, 2013). Du and King (2013) found that both loci were necessary for psychological well-being, with differential impacts from family, friends and spiritual hope on well-being.

Relatedly, and using Weingarten's analysis of witnessing, wonder and the place of hope, further inferences could be made that hope extends beyond an individual's ability to set goals and develop pathway-thought towards the achievement of these goals. Weingarten

(2000) describes how individuals who experienced their significant others' pain or trauma automatically made them witnesses of their condition. Such witnessing made these individuals involved in the process of hope. Weingarten noted that "*hope is something we do*" (Weingarten, 2000, p. 402). Weingarten's description of "doing hope" implies that individuals witnessing the traumatic experience of a loved one were likely to develop empathy and understanding, which could build up into hopeful thinking on behalf of the individual who is feeling hopeless.

As a result of the extreme importance of hope for other psychological outcomes (see Snyder, Michael, & Cheavens, 1999) it has become necessary, according to Weingarten¹, for individuals to be concerned about the welfare of those who feel hopeless. According to Weingarten (2000, p. 402), "hope is something we do with others. Hope is too important – its effects on body and soul too significant – to be left to individuals alone. Hope must be the responsibility of the community". Although Weingarten's proposition provides insight into hope, it is important to mention that the author's idea was based on personal reflections and experience, and not on an empirical study.

The findings from Du and King (2013) and Weingarten (2000) might be applicable in the Ghanaian context, where social relations and spirituality might be necessary for hopeful thinking. Given that the current study is situated in the African context, it was important not only to review the literature within this context, but also to provide other views on how positive psychological constructs such as hope is conceptualised.

¹ Weingarten uses examples from her relationship with her clients and how she hears clients say: I feel hopeless; I do not have any hope. She noted that it was alright for them to feel hopeless because it was not their job to feel hope at the moment.

Hope has been identified as a source of strength for African Americans and Nigerians living with diabetes. Although these findings are from a study that does not relate to mental health, it provides some insight into the way hope can be engendered among individuals living with chronic illness. Using an ethnographic study, with participants from America and Nigeria, Popoola (2005) found that spiritual hope, meaning and faith fostered the patients' desire to live. Patients' hope for tomorrow and belief that they could survive their illness were fostered by faith in God. Hope was engendered not only by the belief in their abilities, but also their faith in God and their recognition of him as their source of hope. This study provides another dimension to how hope might operate outside the individual's pathway and agency thinking. This finding corresponds to Bernardo's conception of an external locus of hope (Bernardo, 2010). An important finding in the study by Popoola (2005) was how patients incorporated the available complementary alternative medicine alongside the treatment given at the hospital. Such a step reflects alternative pathways, which might have been fostered by the patients' belief in God. Mbiti (1969) illustrated that religion forms a central aspect of the world view of Africans. This could explain why the diabetic patients drew a sense of hope from their spiritual experience.

Further evidence for the external locus of hope is demonstrated in the link between religion and hopeful thinking in relation to mental health (Asamoah, Osafo, & Agyapong, 2014; Isaacs & Savahl, 2014; Li et al., 2010). These authors espoused that spirituality and faith in God seemed to have impact on an individual's pathway-thought for achieving set-goals and, consequently, enhancing their mental health. Similarly, a group of individuals from the Ndumo community in South Africa highlighted hope as salient ingredient in the experience of life satisfaction and psychological well-being (Nell et al., 2015). More research is needed to understand how religion might be linked to hopeful thinking. This is especially important in the African context where religion is pervasive. It is of interest to note that some

of the studies reviewed within the African context have not focussed exclusively on adolescents. There is actually a paucity of research on adolescent hope in this region. Therefore, the inferences made regarding the conceptualisation of hope must be interpreted with caution within the context of adolescence. The current study aims to fill up some of the gap in research on how hope is engendered among adolescents.

A study of trauma and resilience in a low-income South African community also provided some evidence on the notion of “doing hope” (Appelt, 2006). Relationships with friends, family, community and God were described as salient in the process of developing hope. Appelt (2006) described how the participants, including those who had suffered trauma and those who witnessed a traumatic event moved from a sense of hopelessness towards the point of “doing hope”. The victims of the trauma reported feeling hopeless because of their situation, but this sense of hopelessness dissipated once they began to develop relationships with significant others in their environment (Appelt, 2006). These findings resonate with Weingarten’s (2000) ideas on the development of hope not being left to individuals alone.

According to Appelt (2006), faith and a close relationship with God also emerged as important sources of hope for many of the participants. As the participants forged relationships with the witnesses of their trauma and gained faith in God, it became easier for them to develop a sense of hope (Appelt, 2006). Hope in the context of Appelt’s (2006) study was not discussed in the light of Snyder’s theory, but some reference was made of a sense of agency developed by the participants. However, agency was discussed as a shared phenomenon among participants of the study. The importance of family, friends and the larger community in “doing hope” illustrates the interconnectedness of systems (depicted in the ecological approach) in building up psychological strengths.

Given the variations in the conceptions of hope highlighted in the studies above, further research, both quantitative and qualitative, is required to highlight other dimensions of

hope that might not be captured in the hope theory. Additionally, there seems to be paucity of research linking hope to mental health in the African setting. Against the background of lack of adequate research on adolescent hope in the African context, the current dissertation explores how hope was engendered among the present sample of adolescents and how such experiences of hope might have been related to their mental health.

2.1.3. Perceived social support and mental health

There is increasing amount of empirical literature on the positive relationship between perceived social support and mental health among adolescents (Klineberg et al., 2006; Malecki & Demaray, 2003; Norris & Kaniasty, 1996; Rueger, Malecki, & Demaray, 2010; Ystgaard, 1997). Moreover, social support systems have been identified as instrumental for the successful transition from adolescence to adulthood (Rueger et al., 2010; Wang & Eccles, 2012). The review presented in this section includes the direct relationships between perceived social support and mental health, between perceived social support and life satisfaction and between perceived social support and hope. Considerations would also be given to available empirical evidence within the African context.

There is some consensus on the importance of perceived social support for mental health during stressful experiences. For example, Cohen and Hoberman (1983) intimated that the perceived availability of social support was instrumental in facilitating psychological well-being among college students in the USA experiencing high levels of stress. During the appraisal of a highly stressful situation, perceptions of social support enable individuals to explore available avenues for seeking social and material support from significant others. Accordingly, because people feel that they are not alone, perceived social support lends itself as an option for coping. It would seem that research on social support has either focussed on its stress-buffering role or as having a direct impact on well-being (main effect hypothesis) (Barrera, 1986; Cohen & Wills, 1985; Lakey & Orehek, 2011).

Further evidence illustrating the stress-buffering role of perceived social support in improving mental health is presented by Wethington and Kessler (1986). These authors obtained a national survey of adults from the University of Michigan to determine the direct and indirect effects of perceived social support on psychological distress. They established that perceived social support was more important than received support in the adjustment to life events. Additionally, received support was significant only when it was mediated by perceived social support (Wethington & Kessler, 1986). This study seems to support the stress-buffering hypothesis. According to Lazarus (1991), during the stress appraisal process, available coping resources are evaluated as either being adequate or inadequate. It is during this process that an individual assesses whether his or her network is capable of dealing with the effect of stressors. Even when actual support was found to be influential, its effect on psychological adjustment was moderated by perceived social support (Wethington & Kessler, 1986). Current studies on social support are still focussed on perceived social support because it is believed that the evaluation of the availability of support has an impact on well-being.

Additionally, documented evidence revealed that perceived social support had a positive effect on the mental health of residents in Oslo, even in the presence of negative life events such as the loss of a loved one (Dalgard, Bjørk, & Tambs, 1995). Accordingly, perceived social support was reported to have a significant buffering effect on mental health especially when the individual had high external locus of control. The measure of mental health used by Dalgard and colleagues only assessed negative aspects of mental health, excluding indicators of psychological well-being. Therefore, the conclusions derived apply mostly to the absence of psychological distress and not the presence of positive states.

Perceived social support has also been studied in relation to bullying among schoolchildren, and the research results have been quite inconsistent (Rigby, 2000; Rethon, Head, Klineberg, & Stansfeld, 2011). Research in Australia among schoolchildren between

the ages of 12 and 16 established that perceived social support may have moderating effects on mental health in the face of victimisation through bullying (Rigby, 2000). The findings of this study demonstrated a significant negative association between perceived social support, bullying victimisation and poor mental health. Additionally, parental support in contrast to teacher support was found to be crucial when adolescents were faced with bullying situations (Rigby, 2000). It is important to note that even when bullying yielded suicidal ideation among adolescents in Australia, perceived social support was still found to have mediating positive effects (Rigby & Slee, 1999). It therefore seems that, adolescents tend to feel more at ease and believe that they can cope if they perceive that they have adequate support from their peers and family, and this tends to counter the effect of bullying. Similar inferences could be used in explaining the role of support in buffering the stress of poverty and academic challenges that adolescents in the Northern region of Ghana may be faced with.

In a related study, Rethon et al. (2011) found that high perceptions of support from friends and only moderate support from family was necessary as a buffer against stress from bullying situations among a sample of adolescents from East London. Rethon et al. (2011) also opined that perceptions of support from friends and family were not sufficient to protect adolescents from mental health difficulties that were as a result of bullying. Given the inconsistent findings in the study by Rigby (2000) and Rethon et al. (2011), more studies evaluating the differential impact of perceived social support from parents and significant others, on mental health are necessary.

Social support as a psychosocial coping resource has been identified as influential for the mental health of college students in a Midwestern University in the USA. Specifically, the beneficial effects of perceived social support (referred to by the authors as functional support) were investigated using the Healthy Minds Survey (Hefner & Eisenberg, 2009). The results of the study showed that both structural and functional support, that is actual social support

and perceived social support, were strongly correlated with mental health, especially in the case of depression (Hefner & Eisenberg, 2009). However, perceived social support was determined to be a better predictor of mental health. In addition, results of this study seem to support the main effect theory, insofar as social support was influential in increasing mental health in the absence of stress.

Further evidence on the impact of perceived social support on negative symptoms of mental health among a sample of American adults comes with Dour et al. (2014). These authors asserted that perceived social support mediated the relationship between changes in levels of anxiety and depression following an intervention for anxiety across different time intervals. Likewise, Cheng et al. (2014) also found that perceived social support in five cities namely, Baltimore, New Delhi, Ibadan, Johannesburg and Shanghai was negatively related to posttraumatic stress disorder and depression among adolescents living in vulnerable environments. Furthermore, internalising and externalising behaviours have also been identified to be negatively correlated with perceived social support among early adolescents in the USA (Stewart & Suldo, 2011). Although, there are few contradictory findings, the preponderance of studies seems to support the evidence that perceived social support has a beneficial impact on mental health.

Apart from reducing negative symptoms, perceived social support has been found to indirectly improve positive indicators of mental health such as life satisfaction. According to Kong and You (2013) there is an indirect relationship between social support and life satisfaction, with this relationship being mediated by loneliness and self-esteem. These findings were also partly confirmed by a study among Mexican adolescents and it was determined that family support was indispensable in the experience of life satisfaction (Edwards & Lopez, 2006). Other authors such as Ng et al. (2014), in their study of underprivileged children in Hong Kong confirmed the hypothesis that perceived community

support mediated the relationship between hope and life satisfaction. It would seem that social support could either have a direct or indirect relationship with life satisfaction. This is probably because perceptions of social support are usually generated through the receipt of external support, which would have to interact with an internal dispositional state such as self-esteem or hope to yield positive mental health outcomes.

Regarding the relationship between perceived social support and hope, Yarcheski and Mahon (2014) in their meta-analyses also ascertained that social support was a compelling predictor of hope, life satisfaction, positive affect and self-esteem. In a similar vein, extant research has demonstrated that supportive environments were likely to engender hopeful thinking (Esteves et al., 2013; Kemer & Atik, 2012; Van Ryzin, 2011; Yarcheski et al., 2001).

It is of interest to note that few studies have focussed on investigating possible indirect relationships between perceived social support and life satisfaction (Kong & You, 2013; Yarcheski et al., 2001). One of the mediated models being tested in the current dissertation is the relationship between perceived social support and life satisfaction mediated by hope. The rationale behind the hypothesised model is that the perception of adequate support would provide a pathway for coping and hope for the future, which could then impact evaluations of life satisfaction (Lazarus, 1991; Snyder et al., 2002). Another mediated model (with paucity of evidence in the literature) that would be tested in the present study is the relationship between perceived social support and mental health via life satisfaction. Further discussions on the hypothesised mediated relationships would be presented in section 2.1.5.

Given the relationship between perceived social support and psychological well-being as well as psychological distress, some studies have sought to explain how perceived social support can be developed and enhanced. For example, Brand, Lakey, and Berman (1995)

opined that both structural and perceived social support are paramount for mental health and four factors were identified as important for improving perceived social support, namely:

1. Changing the way individuals think about themselves, given the close link between perceived social support and cognition.
2. A reappraisal of the role of family origins and the quality of family relations, and how this might impact the evaluations of the availability of support.
3. A need to re-assess ambivalent supportive behaviours in order to avoid wrong and pessimistic interpretations.
4. Promoting social competence by developing positive social relations (Brand et al., 1995).

Psycho-educational techniques were used to implement the above-mentioned strategies in order to improve perceived social support. The results of this study demonstrated that increased perceived social support from family, self-esteem and frequency of self-reinforcement were realised after the residents of a community in the USA took part in the psycho-educational programme (Brand et al., 1995). Although the participants in this study were not adolescents, the lessons from this intervention can be applied in the effort to enhance perceptions of support and consequently, improve mental health among this population. Additionally, given that the conceptualisation of the quality of family relations was identified as important, the current study hopes to demonstrate, using qualitative methods, what constituted quality family relations and other supportive behaviours and how these were utilised for enhancing psychological well-being.

Research on gender and perceptions of support has yielded inconsistent results with some studies showing a significant relationship (Gray, Romild, Hellzèn, & Stordal, 2013; Rigby & Slee, 1999; Rueger et al., 2010; Zimet et al., 1988), while others determined that there was no relationship between gender and perceptions of support (Tonsing, Zimet, & Tse, 2012).

Emerging research evidence has revealed that women tend to have greater perceptions of support compared to men (Grav et al., 2013; Rigby & Slee, 1999; Rueger et al., 2010; Zimet et al., 1988). This finding has been replicated in both adolescent and adult populations. Given that some studies have found no gender differences in perceptions of support, more research is needed in this area. In addition, the current study incorporates gender into the hypothesised model showing the relationships between perceived social support and other variables. Findings from this study would demonstrate whether the hypothesised relationships were true for both males and females.

Against the backdrop of the current study being situated within the African context, it was imperative to highlight studies within this context that provided further understanding of the relationship between perceived social support and well-being. It is worth noting that several studies have provided evidence on the impact of culture on social support (Brannan, Biswas-Diener, Mohr, Mortazavi, & Stein, 2012; Chen, Kim, Mojaverian, & Morling, 2012; Kim, Sherman, & Taylor, 2008) and some of these differences have been highlighted. For example, social support in the Western context has been found to improve well-being, primarily, when it was tied to high self-esteem and personal agency as a source of closeness to others (Chen et al., 2012; Uchida, Kitayama, Mesquita, Reyes, & Morling, 2008). Moreover, a sense of competence or independence seemed to be foremost in the receptions and provision of support in the West. However, collectivist societies are generally more interested in maintaining relational interdependence and are motivated by the need to affirm closeness rather than individual autonomy (Chen et al., 2012).

Further empirical evidence has revealed that the family unit as a source of support predicts well-being among individuals both in collectivist and Western cultures (Brannan et al., 2013). Nonetheless, in the West, friends have been given a position of equal importance as the family. It is of interest to note that most of these studies have been limited to countries

in Asia with little evidence comparing how perceptions of support influence well-being in the African context.

Social support systems in Africa, predominantly comprising collective societies, are typically made up of the extended family, religious organisations and neighbourhood groups (Balogun, 2005; Hanson, 2005; Mbiti, 1969). Gyekye (1997) asserts that as a communal being, a Ghanaian's cognitive appraisal of support is automatically linked to a wide array of support systems. Social support in Africa seems to work on the principle of reciprocity, according to which individuals readily provide support to others because they believe it will guarantee support in the future (Gyekye, 1997; Wilson, 2012). Furthermore, Gyekye (1997) opined that the survival of Ghanaians is embedded in their social networks, in as much as gaining access to resources for well-being tends to be tied to social relationships. Relatedly, Mkhize (2006) also argued that in traditional black African communities children are typically raised by a large extended family community of both the living and the dead. The sense of connectedness and a feeling of being a communal being have made social support an integral part of most African societies. Even with the experience of urbanisation and alienation, social support networks and a sense of being embedded in the community remain central among the elderly in Kenya (Kodzi, Gyimah, Emina, & Ezeh, 2011).

Relatively new evidence from a low-resourced context in South Africa has indicated that support from religious affiliations influenced individuals' psychosocial well-being as a result of the provision of instrumental support to those in need (Nell et al., 2015). Further, research findings in South Africa has indicated that perceived social support from significant others including family and friends were important for reducing post-traumatic stress among AIDS-orphaned children in South Africa (Cluver, Fincham, & Seedat, 2009). It must be noted that a number of studies exploring social support in the African context tend to

concentrate on populations undergoing severe stress related to their physical health, thereby creating the need to review literature that do not focus exclusively on the healthy population.

Scholarly work in Ghana has provided evidence on the association between children's social relations and well-being (Amoah & Jørgensen, 2014). The findings from a sample of street children in Kumasi revealed that these children were relying heavily on their social relations for resources to ensure their physical and psychological well-being. Social support has also been identified as a crucial psychosocial factor influencing the health and well-being of adolescents in Ghana (Glozah & Pevalin, 2014). The authors described that social support had a significant influence on the well-being of adolescents, which consequently had a significant impact on academic success. It is worth mentioning that the General Health Questionnaire (GHQ-12) was designed to detect only common psychiatric disorders and not psychological well-being. In a related qualitative study, Glozah (2015) found that social support in the form of encouragement and advice from family was crucial in promoting the well-being of adolescents in Ghana. In addition, positive peer relations were also instrumental in enhancing health and well-being. Social support was also found to prevent future suicidal behaviours among individuals who had once attempted suicide (Osafo, Akotia, Andoh-Arthur, & Quarshie, 2015).

There seems to be a paucity of research on the relationship between perceived social support for psychological well-being. Moreover, more studies seem to concentrate on the relationship between perceived social support and the reduction of psychological distress, especially among individuals undergoing severe stress. This implies that there is a need for further research on the relationship between social support and psychological well-being. The few inconsistent findings in the area of psychological distress also warrant further exploration. Furthermore, more research is needed to understand how social relations within the Ghanaian context are interpreted and translated into favourable perceptions of support,

which might eventually have a positive impact on the well-being of young people.

Quantitative and qualitative findings from the current study sought to address some of these gaps in research. Moreover, results from this study would demonstrate to what extent perceived social support was necessary for individuals undergoing a different kind of stress (poverty). In addition, given that the present sample comprised school-going adolescents, the findings from this study could highlight the importance of school-related support for adolescent mental health.

2.1.4. Life satisfaction and mental health

There is research consensus on life satisfaction being a key indicator of mental health (Gilman & Huebner, 1997, 2003, 2006; Keyes, 2003; Valle et al., 2006; Sun & Shek, 2010). It is therefore unsurprising that studies exploring life satisfaction have focussed on its correlates rather than its impact on other mental health outcomes. For example, research has revealed that elevated levels of hope are associated with global life satisfaction (Gilman et al., 2006; Valle et al., 2006). Evidence on the positive impact of life satisfaction on mental health comes with Marques et al. (2011) who determined that life satisfaction predicted psychological well-being among a Portuguese sample of adolescents. In addition, life satisfaction among Spanish adolescents has been determined to be associated with lower levels of stress, and internalising and externalising problems (Bendayan, Blanca, Fernández-Baena, Escobar, & Victoria Trianes, 2013; Suldo & Huebner, 2006).

The relationship between life satisfaction and mental health has been largely explained by studies on hope, coping and appraisal. Accordingly, the reduced likelihood of stress and other disruptive behaviours is said to be fostered by the individuals' ability to develop appropriate pathway thoughts, as well as the ability to discover options for coping when faced with a stressor (Chang & DeSimone, 2001; Folkman et al., 1986; Snyder et al., 2002). Apart from providing appropriate pathways, hope which represents a positive outlook

towards life has also been noted to facilitate cognitive appraisals (life satisfaction) and positive affective states. These positive appraisals, in turn, tend to protect the individual from environmental circumstances, which could have resulted in negative emotional states and disruptive behavioural reactions (Lazarus, 1991). Moreover, in explaining the relationship between life satisfaction and positive affect (as a component of mental health), Lazarus (1991) asserted that emotions are a response to meanings derived from appraisals such as life satisfaction. In light of these explanations, other researchers have demonstrated that there is a positive relationship between positive emotions, life satisfaction and psychological health (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Gruber, Kogan, Quoidbach, & Mauss, 2013). It is worth noting that the review presented in this section would include the direct relationship between life satisfaction and psychological well-being and between life satisfaction and psychological distress. Considerations would also be given to empirical evidence focussing on the construct of life satisfaction within the African context.

In relation to life satisfaction as a positive cognitive appraisal style (Lazarus, 1991) that protects individuals from the resultant effects of negative environmental circumstances, Suldo and Huebner (2004) set out to discover whether life satisfaction has a moderating effect on psychopathological behaviour. The authors sought to investigate whether life satisfaction could protect a sample of American adolescents from the effects of stressful life events. The findings of the study revealed that life satisfaction was stable overtime and predicted later externalising behaviours (Suldo & Huebner, 2004). The results also showed that there was no moderating effect of life satisfaction on internalising behaviours when stressful life events were present. Although life satisfaction did not influence internalising behaviours in the long term, its influence on externalising behaviours provides evidence for MHP efforts directed at reducing externalising behaviours both in the present and in the future.

A number of systematic reviews have also demonstrated that life satisfaction is beneficial for the well-being of adolescents. For example, a review of studies on how and why children and adolescents experience their lives in positive ways was conducted by Gilman and Huebner (2003). Evidence from this review revealed that life satisfaction was related to positive experiences such as self-esteem (Kong & You, 2013), self-efficacy (Jerusalem & Hessling, 2009), and internal locus of control (Gilman, Huebner, & Laughlin, 2000). Lessons from this strength-based positive psychology study include the need to focus on individuals' capacity for love, courage, hope and interpersonal skills, and not solely on the repairing of their weaknesses. Gilman and Huebner (2003) also noted that studies on life satisfaction, which employ multidimensional measures reflect an ecological approach that considers the influence of the environment on an individual's functioning. In accordance with these recommendations, the author locates the present study in the ecological model and employs the use of a multidimensional scale in the measurement of life satisfaction.

Further evidence on the importance of life satisfaction for adolescent mental health is available in a review of international research on youth life satisfaction (Proctor, Linley, & Maltby, 2009). Majority of the studies on life satisfaction presented in this review were conducted in the West and a few in Asia with studies from sub-Saharan Africa being limited. In this review, several factors were found to be correlated with life satisfaction either positively or negatively. Some of the factors highlighted in the review by Proctor et al. (2009) include substance abuse, productivity, psychopathology and self-efficacy. These factors were noted to exist as both antecedents and consequents of life satisfaction. Additionally, personality differences, hope, social support and the environment (safe neighbourhood, maintained home and infrequent relocation) were also implicated as possible antecedents. The broad spectrum of factors or correlates that have been identified reiterates the importance

of the ecological approach in planning interventions to ensure an increase in adolescents' life satisfaction and mental health.

It is noteworthy that the absence of research explaining the possible outcomes of life satisfaction has been recognised by some experts in the field of positive psychology. Gilman and Huebner (2006) intimated that researchers have shown that departures from the cognitive component of subjective well-being (SWB) have implications for maladjusted behavioural patterns. However, there is sparse evidence on the psychosocial and psychological benefits of maintaining high levels of life satisfaction. They also opined that research on life satisfaction needs to shift from studying life satisfaction as an outcome variable to understanding the consequences of life satisfaction. In response to this, these authors set out to explore the characteristics of American adolescents with high life satisfaction, and how this was related to certain intrapersonal, interpersonal and academic variables (Gilman & Huebner, 2006). The findings of their study indicated that adolescents with high life satisfaction had positive school experiences and increased participation in structured extracurricular activities (also known as interpersonal mental health indicators). Furthermore, these adolescents had increased grade point averages and increased levels of hope and self-esteem (also known as intrapersonal factors). Low intrapersonal and interpersonal stress was also found to be associated with higher levels of life satisfaction.

Furthermore, differential levels of life satisfaction (high, low and average) were found to reveal differential levels of interpersonal and intrapersonal mental health indicators (Gilman & Huebner, 2006). However, given that their study was correlational in nature, conclusions of causation could not be drawn. A major challenge in separating the consequences of life satisfaction from its antecedents is the lack of studies exploring causal relations. Determining the causal links between life satisfaction and other mental health outcomes is outside the scope of the current study. Nonetheless, the method of structural

equation modelling (SEM), used in the present study, provides a robust evidence for ascertaining the possible structure and direction of relationships among variables as well as the possible consequences of life satisfaction.

A similar study was conducted in a public school in the USA to investigate whether high levels of life satisfaction were advantageous. Suldo and Huebner (2006) sought to explain the functionality of people with very high levels of positivity in domains of experience and not in emotions exclusively. High parental support, low anxiety, low neuroticism, high emotional self-efficacy, and high academic self-efficacy were identified as necessary for an individual to be classified as having high life satisfaction. Adolescents who possessed high scores on life satisfaction were found to score low on variables considered harmful, such as neuroticism and psychopathology (Suldo & Huebner, 2006). It can be inferred from the findings of this study that high life satisfaction had beneficial consequences for adolescents' psychological health including lowered levels of neuroticism. It is worth noting that other components of psychological distress were explored in the present study in order to determine whether they would emerge as consequences of life satisfaction. The components were anxiety, depression and loss of behavioural and emotional control measured as the latent variable of psychological distress. Suldo and Huebner (2006) noted that the findings of their study had implications for health promotion practitioners who focus on resources in order to foster mental health, rather than an exclusive focus on risk factors and clinical symptoms.

Further illustration of the gap in research as identified by Gilman and Huebner (2006) is evident in research on psychological strengths that have explored life satisfaction mainly as an outcome variable. Psychological strengths such as gratitude, kindness and hope (Suldo, Savage, & Mercer, 2014), ecological assets (Oberle, Schonert-Reichl, & Zumbo, 2011), and social relationships (Schwarz et al., 2012) have all been implicated as important for

enhancing life satisfaction. In a similar scholarly work, Proctor and colleagues (2011) found that Values in Action- Inventory of Strengths (VIA-IS) were related to life satisfaction, self-esteem, and positive affect (Proctor, Maltby, & Linley, 2011). An important contribution of this study is the possibility of including VIA-IS in the school curriculum. Additional evidence in the literature has also focussed on establishing that life satisfaction could be improved by implementing strength-based interventions (Proyer, Ruch, & Buschor, 2013). Proyer and colleagues (2013) asserted that values such as curiosity, hope, gratitude and humour improved life satisfaction among a group of German adults after participating in the Zurich strengths programme. Moreover, since life satisfaction is a key indicator of mental health, such interventions have the likelihood of impacting mental health.

Although the current research is not an intervention study, it could provide some evidence for the planning and implementation of future positive psychological programmes in the Ghanaian context. The feasibility of such programmes is underscored in the combination of a variety of psychological strengths into a model in order to ascertain possible relationships. The relationships that are found to be significant and the overall model fit can be used to apprise practitioners with information on the psychological strengths that are important for mental health in the Ghanaian context.

Some studies have found that there are no gender differences in the experience of life satisfaction (Fiori, Brown, Cortina, & Toni, 2009; Gilman & Huebner, 2006). While some studies have found that there are gender differences in adolescents' experiences of life satisfaction (Cyranski, Frank, & Shear, 2000; Ebrahim, Botha, & Snowball, 2013; Meadows, Brown, & Jr, 2006) with females experiencing lowered psychological well-being. For example, Levin, Dallago, and Currie (2011) found that adolescent males in Scotland experienced higher levels of life satisfaction as compared to females. This finding has been reiterated by Zhang and Leung (2002) who noted that there were gender differences in the

relationship between life satisfaction and self-esteem. However, there have been no clear explanations for the observed gender differences. Most studies attribute the differences to a third variable, for example, parent-child communication (Levin et al., 2011). The current study attempts to add further knowledge to the existing evidence on the possible gender differences in the relationship between life satisfaction and mental health.

There is evidence in the literature from the African context showing that life satisfaction could have beneficial impacts on the psychological well-being of individuals. For example, quantitative and qualitative evidence from a study with participants from Australia, Croatia, Germany, Italy, Portugal, Spain and South Africa determined that satisfaction with the domain of family and social relations were important for happiness and finding meaning in life (Fave, Brdar, Freire, Vella-Brodrick, & Wissing, 2011). Further empirical evidence in the literature in South Africa showed that life satisfaction was related to affective components of well-being such as self-efficacy, positive affect and optimism (Jonker, Koekemoer, & Nel, 2015). These studies indicate some of the possible consequences of life satisfaction within the African context.

Cross-cultural research has provided supporting evidence for the varying influence of culture on life satisfaction (Diener et al., 1999; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002). In comparing collectivist and individualistic cultures, social relations and self-esteem as correlates of life satisfaction showed remarkable differences (Schimmack et al., 2002) across cultures. As a result of the evidence showing that life satisfaction differs across cultures, the author in the following paragraphs highlights some of the few studies that have focussed on the interpretations and correlates of life satisfaction within the African context and in Ghana.

Notions of life satisfaction in collectivist cultures including Ghana seem to be derived from subjective perceptions of the self and others as having met the socio-culturally defined

demands and expectations. Moreover, since the self is tied to others, satisfaction with life is determined more by normative desirability rather than individual emotions (Suh, Diener, Shigehiro, & Triandis, 1998). The importance of individual emotions among individualistic cultures is evident in studies that found strong correlations between emotions and life satisfaction (Cohn et al., 2009; Kang, Shaver, Sue, Min, & Jing, 2003).

The collectivist nature of the African society has made social networks an integral part of an individual's life, including his or her evaluation of life satisfaction. For example, evidence from the literature suggests that the collectivist nature of the Ghanaian culture has resulted in individuals deriving satisfaction in life from the close-knit relationships they have within their community (Addai & Adjei, 2013). These social relations that the individual could derive satisfaction from include interaction with family, religious and secular social groups. Relatedly, Kodzi et al. (2013) demonstrated that even in a changing society and despite the influence of urbanisation, support networks still played an important role in the life satisfaction of aged people in Nairobi. Furthermore, a scholarly work in South Africa also established that family functioning was necessary for the experience of life satisfaction (Botha & Booysen, 2014). Findings from this study demonstrated that judgements of satisfaction were tied to the increase in family functioning and levels of attachment. Although the sample for these studies conducted in the African context were adults, the shared worldview of people from sub-Saharan Africa might increase the likelihood of finding similar patterns when investigating how life satisfaction is engendered among adolescents. The use of a qualitative method in the current dissertation provided the opportunity to unearth some important contextual information that would shed more light on life satisfaction among the chosen group for this study.

From the literature on life satisfaction in the African region, another fundamental factor that has been identified as influencing an individual's experience of life satisfaction is

religion. According to Kodzi and colleagues (2013), religious involvement by aged people in Nairobi provided an important source of life satisfaction. Although the results of this study revealed a small correlation, religion was nevertheless found to be significantly related to life satisfaction. In a similar vein, Ebrahim et al. (2013) also ascertained that religious involvement was crucial for the experience of life satisfaction among Indians living in South Africa. Further documented evidence from Ghana, based on the world value survey, has determined that religiosity and religion variables emerged as paramount predictors of how Ghanaians appraise their subjective well-being (Addai, Opoku-Agyeman, & Amanfu, 2014). A probable explanation of the role of religion in life satisfaction is that religious adherents believe that God was able to grant them the prerequisites of a good life.

Other authors reiterated the importance of religion for the experience of life satisfaction. Frequent participation in church activities, personal religious beliefs and the type and strength of personal identification with a certain religious denomination have been found to explain life satisfaction (Ellison, 1991; Ellison, Gay, & Glass, 1989). Although the study by Ellison and colleagues (1989) was not conducted in Africa, it highlights an important factor in most African societies, which is religion. Through the qualitative interviews, the present study aims to determine whether social relations and religion would be described as important for engendering life satisfaction. The qualitative interviews would also provide additional information on other possible factors necessary for engendering life satisfaction, which in turn might be related to mental health among the present sample of adolescents.

2.1.5. Hope, perceived social support, life satisfaction and mental health: Where is the link?

The aim of the present study was to test a hypothesised model comprising positive psychological variables (hope, perceived social support, life satisfaction) and mental health that according to the literature are related. The literature reviewed has established the direct

associations and relationships between the variables under study. In Figure 2.3 (page 67 of this dissertation), the author hypothesises some direct and partially mediated relationships among the variables, and between each of the variables and mental health. The hypothesised partially mediated relationships include hope predicting mental health via life satisfaction, and perceived social support predicting mental health with either life satisfaction or hope having mediating effects. Perceived social support was also hypothesised to be related to life satisfaction with hope mediating this relationship.

The model in Figure 2.3 has not been tested in previous studies, but various aspects of the hypothesised direct relationships have been confirmed. For example, the relationship between hope and life satisfaction has been demonstrated (Gilman & Huebner, 2006; Valle et al., 2006). Research has also determined the relationship between perceived social support and mental health (Proctor et al., 2009). Apart from the direct relationships between hope, perceived social support, life satisfaction, psychological well-being and psychological distress, there are other factors that could influence these constructs. For example, a multiplicity of factors, such as self-worth, locus of control, self-esteem and mastery have been identified as influential in the relationship between hope and perceived social support (Bovier, Chamot, & Perneger, 2004). The presence of multiple factors renders efforts at developing a model challenging. The author does not suggest that the hypothesised model is the only plausible explanation for the relationship among the variables, however, it is one of the parsimonious ways by which these variables might be related.

Some authors argue for the role of spirituality in the relationship between hope and psychological well-being, and between hope and psychological distress (Marques, Lopez, & Mitchell, 2013). However, the hypothesised relationship between hope, life satisfaction and mental health, with life satisfaction having mediating effects, could be explained by the coping and appraisal hypothesis. The coping and appraisal hypothesis espouses that when

adolescents develop appropriate pathway and agency thought and are able to evaluate stressors as obstacles they can overcome, life satisfaction is likely to ensue (Chang & DeSimone, 2001; Lazarus, 1991; Snyder et al., 2002). The positive appraisal style that characterises life satisfaction could, in turn, predict psychological well-being and psychological distress, since life satisfaction has been identified as a key indicator of mental health.

Perceived social support was also hypothesised to predict psychological well-being and psychological distress through the mediation of life satisfaction. This relationship is possible since the evaluation of adequate social support has been identified as a buffer for stress that tends to foster life satisfaction and eventually mental health (Dalgard et al., 1995; Park et al., 2013). Given that the author was unable to find studies testing this mediated relationship, the rationale behind the hypothesised mediated relationship among the variables was that there were studies showing strong direct relationships between these variables. It is therefore possible that adolescents' perceptions of the adequacy of support influenced their evaluation of life, which might have consequently influenced their overall well-being.

Furthermore, the hypothesised pathway connecting the perceptions of social support, hope and mental health might be based on the buffer functions of perceived social support. It is possible that adolescents find pathways through the social support provided by significant others in life (Hagen, Myers, & Mackintosh, 2005), which in turn fosters success in the goal-pursuit process and an eventual experience of psychological well-being. Additionally, the mediating impact of hope on the relationship between perceptions of support and psychological distress could also result in lower levels of distress. Moreover, Snyder (2002) argued that an environment without support could be detrimental for the development of hope.

Previous research on the link between hope and life satisfaction (Gilman et al., 2006), as well as the mediated relationship between parental attachment and life satisfaction through hope (Jiang, Huebner, & Hills, 2013), suggest a plausible path showing a relationship between perceived social support and life satisfaction mediated by hope. This path is explained by the evidence illustrating that received support is important for attachment (Jiang et al., 2013) and also the perception of the availability of support. Therefore, if parental attachment predicts life satisfaction because of the presence hope, then a similar relationship could be hypothesised as existing between perceived social support and life satisfaction (mediated by hope). Additional partial support for this mediated relationship comes with Hagen et al. (2005) who noted that there was a strong correlation between hope levels and perceived social support among their sample of children with incarcerated mothers. According to these authors, perceived social support can contribute to hope especially hope-pathway, which could then have positive effects on life satisfaction. It would seem that similar inferences from the hypothesised mediated relationship between perceived social support hope and mental health could be drawn for the hypothesised relationship between perceived social support, hope and life satisfaction. The author tests these four hypothesised mediated relationship, using the method of SEM, in order to determine if these associations were true for the sample selected for the study.

In summary, compared to the literature reviewed in the West, the relationships between hope, life satisfaction and perceived social support might differ somewhat in sub-Saharan Africa. The possible existence of contextual differences necessitated that data be collected in the current context, in order to determine the extent to which they reflect international trends. One of the noteworthy contributions of the current study is testing a structural model in a context where there is paucity of information. This would provide additional information on the antecedents of mental health, and how these antecedent

constructs (hope, perceived social support and life satisfaction) are related in enhancing psychological well-being and reducing psychological distress in the Ghanaian context. The qualitative data would also provide in-depth information on aspects of the relationship between these variables that might emerge from the quantitative data. An example of what the qualitative findings could elucidate is the possible role of spirituality in developing the adolescents' external loci of hope as argued by Marques et al. (2013) and Bernado (2010).

2.2. Research Questions

Given the literature reviewed, the current study sought to investigate aspects of mental health in school-going adolescents in Ghana, with the specific focus given to answering two major research questions pertaining to mental health. These research questions were focussed on highlighting the relationships between some positive psychological variables and how they related to mental health within the Ghanaian context. Below are the questions that were addressed:

1. Is there a relationship between the variables of hope, perceived social support, life satisfaction and mental health?
2. How do Ghanaian adolescents in the Northern region conceptualise hope, perceived social support and life satisfaction and what other resistant resources are utilised within their context?

2.2.1. Research hypotheses and objectives

To achieve the aim outlined above, quantitative and qualitative methods (as will be discussed in the research methods section) were used to test the set of hypothesis and fulfil the objectives outlined below. For the quantitative method, a latent-variable SEM approach was used to predict possible relationships between variables by testing the following direct and indirect relationships simultaneously (Figure 2.3).

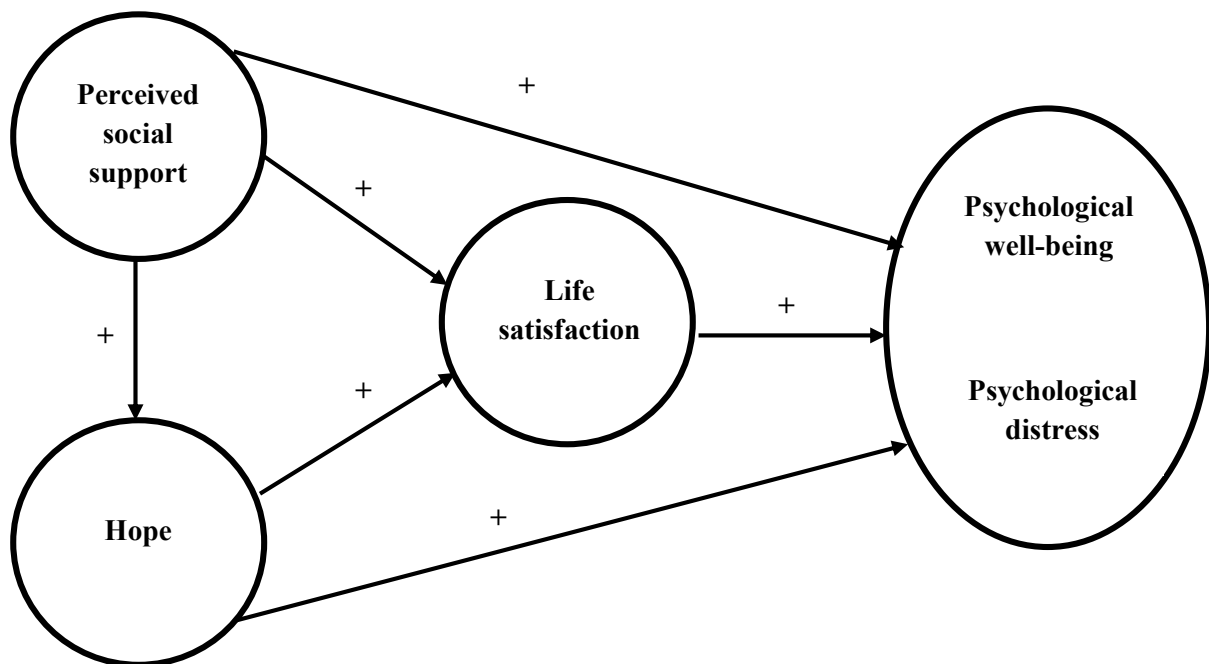


Figure 2.3. Diagrammatic presentation of hypothesised relationships among variables

It was hypothesised that:

1. There would be direct relationships between hope-, perceived social support-, life satisfaction and psychological well-being and psychological distress.
2. There would be direct positive relationships between independent variables of hope and perceived social support and the dependent variable of life satisfaction.
3. There would be a partially mediated relationship between independent variables of hope and perceived social support and dependent variables of psychological well-being and psychological distress, via life satisfaction.
4. There would be a significant direct positive relationship between perceived social support and the dependent variables of hope as well as a partially mediated relationship with life satisfaction via hope.

5. There would be a partially mediated relationship between perceived social support and mental health via hope.
6. There would be gender differences in the hypothesised model.

Through the qualitative method (interviews), the following research objectives would be achieved:

7. The present study aimed to delve deeper into the subjective experiences of hope, the formation of perceptions social support and the interpretations of life satisfaction among Ghanaian adolescents, in order to provide contextual information on the structural relations among the variables. Additionally, the current study aimed to conduct an in-depth exploration of Ghanaian adolescents' personal accounts of generalised resistance resources, and how these influenced their subjective experience of well-being.

2.3. Theoretical Frameworks

Theories on child and adolescent well-being have been noted to be grounded and related to positive psychological thinking and concepts of quality of life (Savahl, Isaacs, Adams, Carels, & September, 2013; September & Savahl, 2009). Savahl et al. (2013) indicated that child and adolescent well-being encompassed several facets of life including social, economic, cognitive, education and psychological. As a result, several factors were necessary to enhance or promote well-being (September & Savahl, 2009). These factors range from psychological strengths (such as resilience, self-esteem as well as hope) to quality family relations, quality peer relations and traditional social processes. The multiplicity of factors necessitated the application of several theories to understand positive aspects of mental health in the present study.

The theories that have guided the current study are Seligman's (2011) well-being theory, salutogenesis (Antonovsky, 1979, 1987), fortigenesis (Strümpfer, 1995, 2006) and the bio-ecological theory of human development (Bronfenbrenner, 1994), these will be discussed

in the following sections. Seligman's well-being theory, salutogenesis and fortigenesis would be discussed under the broad theme of positive psychology. A brief introduction into this paradigm is presented followed by a discussion of each theory in the context of the current dissertation. The author espouses that no single theory can adequately explain the experience of mental health, rather a combination of complimentary theoretical lenses would provide a broader explanatory base.

2.3.1. Positive psychology

As mentioned in the introductory chapter, positive psychology is a paradigm that tends to act as an umbrella term for approaches that emphasise the focus on resources, both internal and external, for health, rather than on pathogenic factors. It is a shift from the view that mental health is fundamentally the absence of disease to an emphasis on enhancing and building resources at the individual, social and organisational levels (Kobau et al., 2011). In addition, positive psychology focusses on presenting a more complete and coherent picture of individuals' state of well-being. This approach does not deny the influence of negative aspects of a person's life on mental health, but highlights the relative importance of positive human experiences (Gable & Haidt, 2005). Moreover, the tendency for research to concentrate on negative human experiences is often motivated by compassion, pragmatism and our current understanding of human nature and psychological processes (Gable & Haidt, 2005).

In reviewing the link between positive psychology and mental health, Kobau et al. (2011) noted that positive psychology seeks to study positive attributes about a person, while MHP is concerned with fostering those attributes. Mental health in its positive sense is concerned with ensuring optimal functioning and contributing to the development of the community. Besides, optimal functioning cannot be promoted only by alleviating symptoms of mental ill health, at best this would merely ensure that the suffering associated with such

illnesses is managed. Optimal functioning arises from identifying, understanding and enhancing the positive attributes and capacities of the individual (Kobau et al., 2011).

Norrish and Vella-Brodrick (2009) argued that given the current state of adolescent mental health, the positive psychological framework holds much promise for improving mental health. Their study provided a review of important conceptual areas in positive psychology that included authentic happiness, hope, life coaching, gratitude, kindness and strength interventions. They further argued that the aims of positive psychology were similar to those of mental health and could therefore be adopted as a framework to improve adolescent mental health (Norrish & Vella-Brodrick, 2009). This view has informed the choice of theoretical frameworks for the study.

Some of the theories that find their roots in positive psychology include the broaden and build theory (Fredrickson, 1998, 2001), resilience (Masten, Cutuli, Herbers, & Reed, 2009) hope theory (Snyder, 2002), Bandura's self-efficacy theory (Bandura, 1982), fortigenesis (Strümpfer, 2006) and salutogenesis (Antonovsky, 1987). These are briefly discussed below. The broaden and build theory posits that positive emotions have the ability to broaden people's thought-action repertoire and enhance their social and psychological resources (Fredrickson, 1998). Resilience generally refers to how people adapt after experiencing a major negative life event (Masten et al., 2009). The hope theory has already been discussed extensively so will not be described here. Self-efficacy is built on the tenet that an individual's perception of their ability to achieve their goals is dependent on their behaviour, environment and cognitive factors (Bandura, 1982). Some of the common constructs associated with the positive psychology approach are hope, self-worth, self-esteem and life satisfaction, and these are thought to affect mental health positively (Marques et al., 2011). Among the theories listed, Seligman's (2011) well-being theory, salutogenesis and

fortigenesis will be adopted as the positive psychological frameworks for understanding the relationship between positive experiences and mental health.

2.3.2. Seligman's well-being theory

Seligman (2011) proposed a theory of well-being comprising five salient elements, namely, positive emotion, engagement, positive relationships, meaning, and accomplishment (PERMA model), which are described briefly below. Moreover, Seligman (2011) noted that each element had to contribute to well-being and individuals need to pursue these elements as an end in itself, and not as a means to an end. Additionally, the elements of well-being had to be independent and at the same time related to one another.

According to this model, the first component, which is positive emotions, comprises life satisfaction and happiness and other positive states such as pleasure, comfort, inspiration, curiosity and love (Seligman, 2011; Wissing, 2014). The subjective experience of positive emotions in the presence of other elements was described as essential for well-being. Engagement, also an element of the PERMA model, refers to the extent to which an individual is fully engrossed in a given task. It is related to the concept of flow, which was proposed by Csikszentmihalyi (1990) to describe voluntary activities that combine challenges and skills at work, play, art and sports (Wissing, 2014).

The third component concerns itself with the essence of positive relationships for well-being, which range from the experience of social support to offering assistance and love to others. The meaning element (which is the fourth of the elements of well-being) of the PERMA model was described as being a part of something beyond oneself (Seligman, 2011), in that it allows the individual to view the world as comprehensible and provides purpose, direction and useful aspirations for the individual (Steger, 2012). The fifth and last component of this model focusses on the individual's achievement and accomplishment in

life (Seligman, 2011). This component pertains to an individual's desire to achieve a certain goal, win a competitive event or even gain mastery of a skill.

Despite the pioneering work advanced by the PERMA model, it has not been without criticisms. For example, Wissing (2014) argues that the PERMA model is not a well-developed theory and seems to lack philosophical depth, and only seems to highlight the different aspects of well-being without adequate theoretical underpinnings for the elements that were identified. Notwithstanding the criticism, it could be argued that, given that the model is still in its infancy, it provides a promising approach to the understanding of well-being.

2.3.3. Salutogenesis

The term salutogenesis was coined by Antonovsky, a medical sociologist who was interested in the effects of menopause on women who had undergone stressful life events such as the holocaust (Antonovsky, 1979). Antonovsky's research interest was spurred by the discovery that a proportion of these women, despite their extremely negative life experiences, managed as well as women who had not been affected by the holocaust (Antonovsky, 1979). Salutogenesis, originating from the Latin word *salus*, meaning health, and the Greek word *genesis*, meaning origin; i.e. the origins of health (Antonovsky, 1979) became a product of the investigations on the factors for health among these holocaust survivors. Antonovsky thought that such a question was necessary because despite the ubiquity of stressors most people still manage to stay healthy.

In describing the salutogenic model, Antonovsky noted that health and disease are on a continuum, which was termed the health/dis-ease continuum (Antonovsky, 1996). A segment of this continuum was labelled breakdown and the other end was termed ease (see Figure 2.4). Antonovsky (1979) opined that every individual at different stages of life are at varied points of the continuum, but over time people move from one breakdown type to

another and the health/dis-ease continuum is defined by the degree or absence of pain experienced on this continuum. Although Antonovsky's (1987) theorising on health seems to focus on the absence of pain and suffering, he draws on the presence of positive human experiences to explain why people do not breakdown. Antonovsky (1987, 1996) further theorised that it was necessary to discover those factors that prevented breakdown and pushed individuals towards the health end of the continuum. According to Antonovsky (1996), these factors were salutogenic factors. These salutogenic factors are the focal point of the present study.

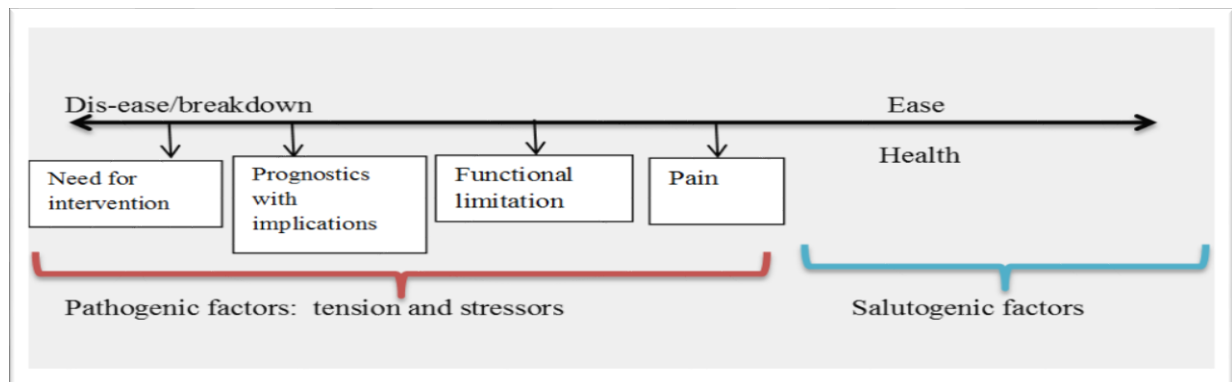


Figure 2.4. Health/Disease continuum as described by Antonovsky (1979).

As already indicated the two ends of the health/dis-ease continuum represent ill-health and good health, respectively. Salutogenesis or salutogenetic factors, on the one hand, prevent tension or stressors from leading to breakdown and pushes the individual closer to the health end of the continuum. Pathogenic factors on the other hand, are responsible for breakdown when tension and stressors become overwhelming (Antonovsky, 1987; Lindström & Eriksson, 2010). It is worth reiterating that MHP is built on the premise that it is possible to reduce the overall burden of mental ill-health by ensuring that more people are moving towards the health end of the continuum. Moreover, Antonovsky (1979) noted that it would be wrong to assume that the focus on diseases is unnecessary, but rather that there is a need to

allocate a portion of available resources to issues concerning health. Drawing from Antonovsky's line of reasoning, the current study examines the relationship between certain salutogenic factors and mental health. Hope, perceived social support and life satisfaction can be regarded as salutogenetic factors for pushing adolescents towards the mental health end of the continuum and in the direction of psychological well-being and away from distress.

In order to shed more light on the need for a salutogenic conceptualisation of health and, in the case of this study, mental health, Lindström and Eriksson (2010 p.16) modified Antonovsky's idea of the "river of life" to "health in the river of life". According to these authors, we are all born into this river of life but some are born at ease where the river flows quietly. These individuals also receive the necessary resources to swim, while others are born close to the water fall (dis-ease) without the prerequisites for a good life. The authors further intimated that the river, which is life, is full of risks and our and life experiences enable us to appropriate the available resources to adapt and improve our quality of life (see Figure 2.5) (Eriksson & Lindström 2008; Lindström & Eriksson, 2010). These resources for health play an instrumental role in reducing the propensity for ill-health, while providing appropriate platforms for the experience of psychological well-being. In the present study, adolescents in the Northern region could have greater opportunities for experiencing "health in the river of life", when prerequisite resources are available. Illustrated in Figure 2.5 is a diagram by Mittelmark that provides an illustration of how individuals come to the point of ease or dis-ease.

As expounded by Lindström and Eriksson (2010), every individual is born into the river of life with a unique *life situation* (see Figure 2.5), which includes their age, ethnicity, gender, orientations, predispositions, luck and even their choices. Such unique life situations influence the kind of life course stressors to which one is exposed. For example, a Ghanaian adolescent in the Northern region living in a poor household, in an environment with good

social networks and strong religious orientations, might have a *life situation* that is different from an adolescent born to a wealthy family in the Greater Accra region in the south. The life conditions and circumstances of these adolescents might predispose them to distinct sets of stressors and resources.

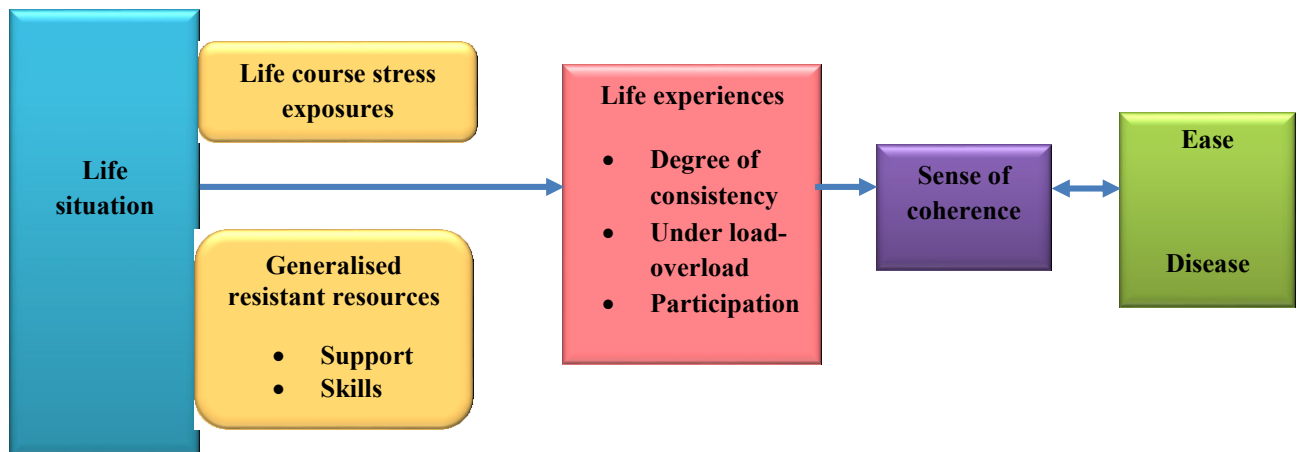


Figure 2.5. Salutogenic conceptualisation of health by Mittelmark (2010), adapted from (Antonovsky, 1996).

For the adolescent born in the Northern region, where the basic amenities (and material resources) in life are almost non-existent, there might be a greater risk of his or life gravitating towards the dis-ease end of the continuum. The case might be different for an adolescent from a family with the necessary resources that would enable him or her to combat the stressors that they encounter as a result of their life conditions. Moreover, the resources at each adolescent's disposal will determine whether he or she would succumb to the strain of the stressors. For example, the availability of mental health promotion programmes as well as stimulating social environments could positively influence the adolescents' life conditions. Furthermore, the *life course stress exposures* can either be short-lived (acute), for instance bereavement or long-lived (chronic), such as a generalised anxiety disorder. Either way, as individuals' *life situation* influences the stressors they face; they also

influence the generalised resistance resources (GRRs) they develop. The subject of GRRs will be discussed in more detail later in this section.

Life course stress exposures and *GRRs* combine to form an individual's *life experiences*. A high degree of consistency in a person's life experiences is usually due to the capacity of their GRRs to consistently enable them to manage their stressors. When an individual is exposed to a stressor that exceeds their capacity or ability, an overload ensues. On the one hand, an *overload* in an individual's *life experience* might result in that individual having a view of life as being *unmanageable*, *meaningless* and *incomprehensible*. Such perceptions undermine mental health and well-being in general. On the other hand, when the resources are adequate, an *under-load* is experienced and the individual is more likely to develop a sense of coherence, viewing life as *manageable*, *meaningful* and *comprehensible*. In the current study, the author suggests that adolescents' psychological well-being may be fostered by the resources at their disposal and their global orientation towards life. As will be described later, an individual's global orientation towards life (Lindström & Eriksson, 2010) shares some similarities with some of the aspects of mental health that are the focus of the study, namely hope, perceived social support and life satisfaction.

A close look at Antonovsky's health/disease continuum reveals that he did not intend to explain overall well-being, but reasons for the movement towards the health end of the continuum (Mittelmark & Bull, 2013). Mittelmark and Bull (2013) further explained that it was necessary to open up the salutogenic model of health in order to address other salutogenic questions that might be able to provide answers to well-being, since the health/disease continuum seems to be more adequate in explaining movement on the health/disease continuum. As a theory of mental health, the right salutogenic question would be what are the internal and external resources that foster adolescent mental health? In the current study hope, perceived social support and life satisfaction could be regarded as internal

resources, which might be influenced by some possible underlying external resources such as material resources or received support.

Sense of coherence (henceforth referred to as SOC) and generalised resistance resources are the two main concepts that form the bedrock of the salutogenic framework and will be the focus of the discussion in the next two subsections.

2.3.3.1. Sense of coherence and mental health

Sense of coherence refers to the ability of an individual to make meaning of his/her world. It reflects their view of different aspects of life and a capacity to respond to stressful situations (Lindström & Eriksson, 2005). Antonovsky (1987, p. 19) defined sense of coherence as:

A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by the stimuli; and (3) these demands are challenges, worthy of investment and engagement.

This orientation makes the world manageable, comprehensible and meaningful. In addition, SOC is regarded as a resource that enables a person to effectively manage stressors or strain by considering available internal and external resources. Sense of coherence also allows an individual to organise these resources to promote effective coping in a health-promoting manner (Eriksson & Lindström, 2006).

The three dimensions of the SOC construct, namely comprehensibility, manageability and meaningfulness, provide a person with the determination to recognise resources in themselves and in their immediate environment. These three interactive dimensions enable the individual to utilise these resources appropriately in order to have a more structured life experience (Lindström & Eriksson, 2010). The meaningfulness component represents the

motivational factor or driving force for life (Lindström & Eriksson, 2010). Manageability refers to the belief that resources for coping are available while comprehensibility is concerned with the ability to adequately understand the challenges that an individual encounters (Antonovsky, 1996). A combination of these three dimensions provides a person with a life orientation and a state of being (Lindström & Eriksson, 2010). Lindström and Eriksson (2010) further explicate that when meaning is developed, a person is able to enforce a form of structure on his/her life and resources, thereby fortifying the other two components. These authors also put forward the view that what gives meaning is not as important as the belief that such meaning exists (Lindström & Eriksson, 2010).

The description of SOC given above might seem to suggest that the responsibility of developing a strong SOC lies with the individual alone, but this is not the case. In order to avoid such misconceptions, Antonovsky (1996) argued that the development of the SOC is dependent on three types of life experiences, namely consistency, overload and under-load, and participation in socially valued decision-making. This implies that life experiences are not only developed by an individual's position in the social structure, but are also influenced by such structures or social systems. The salutogenic framework, which includes SOC provides a good explanatory base for adolescent mental health because this framework is concerned with not only with reducing specific risk factors, but it also focusses on factors that can promote mental health (Antonovsky, 1996).

Salutogenesis with its focus on health-promoting resources rather than pathogenic factors has generated research interests internationally. Based on evidence from some Scandinavian countries, the relationship between SOC and health has been found to be similar across adult and young populations (Brassai, Piko, & Steger, 2011; Grøholt, Stigum, Nordhagen, & Köhler, 2003; Torsheim, Aaroe, & Wold, 2001). Relatedly, research has also demonstrated a correlation between a strong SOC and physical health and an even stronger

relationship with mental health (Antonovsky, 1996; Eriksson & Lindström, 2006; Wainwright et al., 2008). Further evidence has revealed that SOC influences positive affect and negative affect (Öztekin & Tezer, 2009), as well as anxiety and depression among adolescents in Norway (Moksnes, Espnes, & Lillefjell, 2012). In a similar vein, scholarly work in South Africa demonstrated that making meaning out of life enabled the individual to evaluate stressors as manageable and to choose effective coping strategies (Hutchinson, Pretorius, & Stuart, 2007).

Although SOC is a useful construct for explaining mental health, the author chose to study hope, perceived social support and life satisfaction because in addition to their similarity to SOC, these constructs offer greater specificity in understanding the pathways to mental health. Sense of coherence is a global construct while these positive psychological constructs explain specific pathways to mental health. In describing the similarity between SOC and the constructs used in the current study, hope could be said to share some similarity with meaningfulness. Snyder (2002), noted that hope is a motivational construct that enables the individual to find plausible routes, which could be said to be worthy of investment and engagement during the goal-pursuit process. Manageability, which refers to the perception of availability of resources, can be likened to perceived social support that pertains to the evaluation of available social support. Life satisfaction could be associated with comprehensibility, which is the extent to which an individual views different domains of their life as structured, predictable and explicable there by resulting in satisfaction.

2.3.3.2. Generalised resistance resources and well-being

Antonovsky (1979) suggested that generalised resistance resources (henceforth known as GRRs) were necessary in combatting a variety of stressors. Generalised resistant resources were contrasted with specific resistant resources, which Antonovsky opined to be peculiar to

the pathogenic orientation (Antonovsky, 1979). Generalised resistant resources have been defined as any:

Physical, biochemical, artifactual-material, cognitive, emotional, valuative-attitudinal, interpersonal-relational and macro-sociocultural characteristic of an individual, primary group, subculture, or society that is effective in avoiding and combatting a wide variety of stressors and thus preventing tension from being transformed into stress (Antonovsky, 1979 p. 103).

In other words, these resources range from physical qualities to material resources, knowledge, social networks and culture. The difference between specific resistant resources and GRRs is that GRRs are used for a variety of stressors, while specific resistant resources are necessary for combatting specific stressors. The availability of GRRs enables individuals to develop SOC (Lindström & Eriksson, 2010). Furthermore, Antonovsky (1996) related that the degree of consistency in the encounter with stressors and the presence of appropriate GRRs foster a repeated life experience that makes the world seem to “make sense” cognitively, emotionally and instrumentally.

Although GRR is also a major concept in the salutogenic framework, research to date has focussed extensively on SOC. This is because the significance of a GRR seemed to be dependent on its ability to influence the development of a high SOC. This would imply that the presence of SOC naturally underscores the effectiveness of some underlying GRR. An exception to this trend is a study by Wilson and Mittelmark (2013), which focussed exclusively on studying the GRRs necessary for female migrants in Accra. As pertaining to qualitative studies, this study provided an in-depth description of how GRRs such as religiosity, social support and financial resources enabled these female migrants to cope with life in the big city. In a related study, Moons and Norekvål (2006) also emphasised the need for GRRs to promote consistency in life experience, which, in turn, would increase a person's

SOC. As a result of the significance attached to GRRs for enhancing well-being, one of the aims of the present study is to explore the GRRs utilised by adolescents in the Northern region of Ghana to cope with stressors and foster a life experience that is meaningful.

2.3.4. Fortigenesis

Fortigenesis is a framework that was developed by incorporating ideas from salutogenesis and Keyes' proposition of a dual continuum of mental health. This framework was only discussed briefly because most of the ideas have been highlighted in the salutogenic theory. The term fortigenesis is derived from the Latin word *fortis*, meaning strength, and *genesis*, meaning origin – the origins of strength (Strümpfer, 1995). A related term, fortology refers to the science of strength. Fortigenesis encompasses the process of generating strength at different points and only the health end of the continuum (Strümpfer, 1995, 2006).

Relatedly, Wissing and van Eden (2002) argued that there is a need to understand the nature, manifestations as well as the process of fostering psychological well-being. Fortigenesis is concerned with the sources of strength in different spheres of life, including work, marriage and parenthood (Strümpfer, 2006). Strümpfer (2006, p. 14) espoused that fortigenesis are those

Factors that places an individual along each continuum, and as a process which – depending on subjective and external conditions – waxes and wanes, and thereby moves the individual between the poles of the continua: from a pure form of mental illness down to absence of such illness, and from languishing to pure flourishing.

Strümpfer, noted that this framework was based on four assumptions, namely:

1. On the continuum of mental health or illness, the process of fortigenesis causes people to move in the direction of more or less strength.
2. Stressors due to unwarranted demands are part of the human experience and can influence the individual's health negatively.

3. There are sources of strength that can be employed towards development and also to foster resilience in adverse situations.
4. There also are purely positive experiences that bring joy, provide meaning, and encourage growth and psychological well-being (Strümpfer, 2006).

In Strümpfer's (2006) first assumption, there is a reference to the process of fortigenesis that waxes or wanes as a result of positive experiences or external conditions. These experiences include the fulfilment of a goal, self-improvement in the form of education, self-directed work experiences, joys of parenthood and at times religious conversion (Strümpfer, 2006). These experiences are responsible for the upward or downward movement along the languishing-flourishing mental health continuum. In the same way, adolescents' experience of psychological well-being or psychological distress could be influenced by continuous encounters with positive experiences. During a downward movement along the same continuum, fortigenic processes might be weakened as a result of the loss of a loved one, lack of life satisfaction, persecution, social isolation, the perception of inadequate support, repression or war (Strümpfer, 2006).

The second assumption emphasises the influence of stressors on psychological well-being. Likewise, adolescents in the present study might be exposed to stressors such as poverty and academic challenges that have the potential of influencing their well-being negatively. These stressors can reduce the propensity of having positive experiences that are necessary for the waxing of fortigenic process. When this occurs continually, adolescents are more likely to move downward on the languishing-flourishing continuum and, probably in the direction of psychological distress.

The third assumption highlights the importance of an adolescent's source of strength. There could be internal sources such as individual agency and external sources, which could include adolescents' social network and the availability of material resources. These sources

of strength need to be employed by the adolescent in order to foster their growth and psychological well-being.

The fourth assumption outlined in fortigenic theory relates to the salient role of positive experiences, which could include feeling hopeful, perceiving that support is adequate and subjectively evaluating one's life as satisfactory that could wax or wane fortigenic processes. These positive experiences could enhance positive emotions among adolescents and stimulate their growth. This is because they are confident of their future and believe that they have the required support to manage the stress that they encounter.

The first and last assumptions of fortigenic thinking reflect a consensus with Keyes's (2003, 2005, 2007) proposition of mental health as flourishing. In fact, the first assumption is drawn from Keyes's (2005) proposition of the existence of two different models, with one representing mental health and the other mental illness. The second and third assumptions resonate with Antonovsky's salutogenic thinking, which recognises that ubiquitous stressors affect our lives on a daily basis. Nonetheless, there are certain resources that can be harnessed to ensure that individuals do not succumb to tension resulting from the strain of stressors (Antonovsky, 1979, 1987). It would seem that fortigenesis highlights the link between Keyes's idea of mental health and Antonovsky's theory of health by showing that pathogenesis cannot be abandoned completely in the attempt to understand the science of well-being.

Mental health and its enhancement can therefore be regarded as a fortigenic process and hope, perceived social support and life satisfaction would be the experiences that result in an improvement in adolescents' mental health. The fortigenic theory is applicable in the current study because it emphasises resources and sources of strength for the enhancement of well-being. It is a relatively new theory which has not been broadly tested but has a promising future in positive psychological research, especially in the African context.

It is evident that most positive psychological theories seem to advocate for the focus on strengths, resources and positive experiences, which would be instrumental in enhancing adolescent mental health. As already discussed in the introductory chapter, the platform for growth among young people renders the positive psychological paradigm a suitable lens for understanding mental health. However, this approach risks isolating the development and enhancement of strengths to the adolescent if the fostering of strengths is not supplemented by an understanding of the contribution of their ecological system. The bio-ecological theory has therefore been included as a supporting framework in understanding the relationships between hope, perceived social support, life satisfaction and mental health.

2.3.5. Bronfenbrenner's bio-ecological theory of development

Ecological systems theory is increasingly being applied within public health and health promotion research (McLaren & Hawe, 2005; Stokols, 1996). The main thrust of ecological systems theory is that there is a need to look beyond the individual and extend our conceptions of human behaviour to environmental factors that might be playing a salient part in a person's health (McLaren & Hawe, 2005). This theory also espouses that there is a link and a form of interdependence between individuals and their context (McLaren & Hawe, 2005; Wicker, 1984). There are a number of ecological theories, including the eco-behavioural perspective, Bronfenbrenner's ecological model, eco-epidemiology, ecological community psychology and ecological public health (McLaren & Hawe, 2005).

Bronfenbrenner's ecological theory of human development falls within the collection of ecological theories, but with a specific emphasis on the role different systems play in the development of a child (Bronfenbrenner, 1994). It is important to note that the bio-ecological model represented the later ideas proposed by Bronfenbrenner with a focus on the interaction between the person, process and context. The major distinction between Bronfenbrenner's early and late ideas is the focus on the interaction between time, person and processes, which

was not a primary consideration in his previous theorising. Derksen (2010) noted, in a review, that a number of studies had highlighted a shift in Bronfenbrenner's original theorising. This shift is related to the focus on the environment to the exclusion of the developing individual (Bronfenbrenner & Morris, 2007). According to Bronfenbrenner (1994, 2005), the bio-ecological model is based on two propositions. The first proposition is that human development occurs through the progressive complementary exchange between a person and significant objects or individuals in his or her environment. Furthermore, the exchanges (which he referred to as proximal processes) between the individual and the environment must be frequent in order for it to be effective. Examples of such interactions include parent-child relations and child to child communications during play.

The second proposition is that the form and direction of proximal processes is dependent on the characteristics of the individual, environment and developmental outcomes under consideration (Bronfenbrenner, 1994). These two propositions suggest an interaction between the person, process, context and time (also known as the PPCT model).

Bronfenbrenner and Morris (2007) noted that there were three important attributes of the person that must be considered in understanding the PPCT model. These include the person's dispositions, resources and demands. Dispositions refer to the characteristics of the person that could influence future developmental outcomes mainly as a result of their ability to activate proximal processes as well as sustain them. Resources pertain to the assets and deficits that would enable or hinder a person from actively engaging in proximal processes, while demands refer to the capacity to encourage reactions from the environment that are necessary for psychological growth (Bronfenbrenner & Morris, 2007; Tudge, Makrova, Hatfield, & Karnik, 2009).

Bronfenbrenner (2005) advocates in his bio-ecological model that proximal processes are more essential for the context in which the developing individual lives. Proximal

processes such as interactions with parents were described as influential in enhancing competence and psychological strengths, particularly in stable environments. Even in disadvantaged contexts, Bronfenbrenner and Morris (2007) noted that proximal process could be very influential in ensuring positive developmental outcomes among children and adolescents. The time component of the PPCT model emphasises the need for stability and regularity in proximal processes (Bronfenbrenner, 2005). The effectiveness of systems in enabling the development of individuals is dependent on the degree of consistency and predictability of the interactions taking place. Changes in the ecological system that include divorce, family relocation, new school arrangements and perhaps violence in the community could negatively impact on development.

In the case of mental health, bi-ecological theory highlights those proximal processes or relationships, which enable an individual to develop the qualities that enhance his or her mental health. Additionally, the development of the internal factors necessary for mental health is influenced by the proximal processes in the adolescents' environment and frequency of interactions. As recommended by Tudge et al. (2009), the current dissertation uses the major concepts of the later versions of ecological model. There are four major systems that make up the ecological system and these are described below with statements on how each system could affect the mental health of adolescents.

2.3.5.1. Microsystems

Microsystems represent the smallest of all the ecological systems and are the closest to the developing individual. The microsystem consists of an individual and their relationship with significant others in their immediate environment (Bronfenbrenner, 1994). It is also a pattern of activities or relations between individuals in a face-to-face setting, with features that either allow or hinder frequent interaction within the proximal environment. Examples of such settings include schools, peers, family, churches and workplaces (Bronfenbrenner,

1994). A person's development is greatly influenced by the proximal processes that occur in the microsystem and is also dependent on the content and organisation of the microsystem. These contents include the resources and even problems in the microsystem that might influence the proximal processes.

Studies on school MHP have shown the importance of proximal processes such as teacher-learner relationships and peer-to-peer relationships in enhancing mental health among learners (Cappella, Frazier, Atkins, Schoenwald, & Glisson, 2008; Tudge et al., 2009; Stormshak et al., 2011). Relatedly, Derksen (2010) also highlights the role of the ecological perspective in child and youth care, especially in planning educational curriculum and the determination of the necessary skills for practitioners at different layers of the ecological system. Such interactions are examples of proximal processes that occur within the microsystem to enhance or negatively influence health. In a similar vein, the microsystem can either work for the promotion or to the detriment of adolescents' mental health. Within the family, the development of positive qualities, such as good social relations could enable adolescents enjoy better mental health. The development of these positive qualities could be partly due to the kinds of interactions that adolescents have with significant others in their lives.

It is worth noting that the current dissertation focusses mainly on proximal processes (with minimal reference to the other systems) within the microsystem and mesosystem and how these promote mental health. This is because although the inclusion of other systems is necessary in the development of adolescent mental health, the personal interactions taking place in these systems seemed to have a more direct bearing on the individual's development.

2.3.5.2. Mesosystem

Bronfenbrenner (1994) describes the interrelations and connections between the different microsystems as the mesosystem. A mesosystem refers to the interaction between

one microsystem or setting and another in which the developing person lives. For example, the interaction between the home and school will comprise a mesosystem. An interesting aspect of the mesosystem is that, although it does not directly affect the individuals in it, the interactions between these settings determine the person's development. For example, if the school as an institution enacts measures to foster positive qualities among adolescents, and seeks to extend this to adolescents' home, the effectiveness of such measures would be dependent on the successful interaction between the two microsystems. Moreover, when there is a successful interaction between the two microsystems, the individuals in the microsystem benefit from the impact of the measures being implemented in both microsystems (home and school). In the current study, engendering hope, perceived social support and life satisfaction among adolescents would be dependent on the successful interaction between the home and school environment where adolescents live. For instance, adolescents might require adequate support from the home and school (emotional, informational and instrumental) to experience satisfaction in all domains of their lives. The two systems must work together to promote well-being for the adolescent.

2.3.5.3. Exosystem

The exosystem refers to the interconnection of two or more settings, one of which does not accommodate the developing individual, nonetheless events within these settings indirectly impact the setting that houses the individual in question (Bronfenbrenner, 1994). Examples of exosystems include the workplace of the adolescents' parents, social services, mass media and local politics (McLaren & Hawe, 2005). McLaren and Hawe (2005) define exosystems as the relationship between the settings that an individual may or may not be directly involved with, but still has some impact on the development of the individual through his or her immediate environment. For example, stress at the workplace of an adolescents' parent may be transferred to the child during a parent-child interaction, and this

might have adverse effects on the adolescent (McLaren & Hawe, 2005). Given that the current sample of adolescents might belong to agrarian households, the adolescents' ability to cope with the stress of poverty might be indirectly influenced by the success or failure of their parents' farming occupation. This is because a poor harvest and a failure to earn adequate income from their subsistence farming could influence the capability of the parent to satisfy the adolescents' needs.

2.3.5.4. Macrosystem

The macrosystem can be likened to an umbrella that covers the other systems and all individuals are indirectly influenced by the macrosystem they find themselves in. The macrosystem is an overarching pattern of the individual systems that are peculiar to a given culture or subculture. The macrosystem also includes the material and immaterial ways of living as well as life-course opportunities, which are all found in a broader system (Bronfenbrenner, 1994). Bronfenbrenner (1994) opined that it is important to go beyond cultural categories and to focus on the social and psychological features of the macrosystem, which might have some influence on development within the microsystem. Government policies and cultural practices in the Northern region of Ghana could have an indirect effect on the formation of positive experiences. For example, government policies to increase educational opportunities in the North could increase levels of hope among adolescents in this region. In addition, religious and cultural practices such as beliefs in the supernatural might also engender hope.

As previously explained, the ecological theory of human development is being used in the current study because exploring aspects of mental health from a positive psychological perspective alone might suggest that the development of such positive qualities (such as hope, perceived availability of support and life satisfaction) lies within the individual alone. The

bio-ecological theory of human development helps to illustrate how interactions between each system have a bearing on the individual.

In summary, conceptualising mental health as a positive state is important. It must, however, be noted that an individual cannot adequately comprehend health, unless there is an understanding of how the factors for health guide the movement of people from disease to health. It is therefore suggested that, while focussing on what makes an individual healthy, there is a need to draw links and probable relationships between our positive and negative states. Such a conceptualisation of mental health is reflected in the choice of measurement scale for mental health. Although it measures the presence of positive states, it also examines the absence of negative states such as anxiety and depression.

2.4. Conclusion

The preceding paragraphs have highlighted some of the studies that have been conducted in the field of positive psychology, specifically on mental health, hope, perceived social support and life satisfaction. A review of the literature revealed that these constructs might be related. The studies reviewed were predominantly from the West with few from sub-Saharan Africa. Important research gaps that have been identified include the sparse evidence on positive psychological research among adolescents in Ghana. Both internationally and in the Ghanaian context, there is limited empirical evidence on studies that have employed scales that measure both positive and negative mental health outcomes.

Additionally, there is also a major research gap in the area of possible outcomes of adolescent life satisfaction. Further limitations identified in studies that were reviewed include the extensive use of quantitative methods, without the presentation of complimentary qualitative data. There is also a lack of scholarly work in the Ghanaian context testing possible structural models on the relationships between these constructs. Such models are necessary for MHP interventions that are based on positive psychological principles. Some of

these limitations were addressed in the current dissertation, which sought to provide evidence on aspects of Ghanaian adolescents' mental health.

One theme that was repeatedly mentioned in the studies that were reviewed was the application of the ecological approach in the promotion of mental health. Other important theoretical frameworks including Seligman's theory of well-being, salutogenesis and fortigenesis have also been discussed. The following chapter is a discussion of the methodology used in gathering both quantitative and qualitative data.

Chapter 3: Philosophical Assumptions and Methodology

An important consideration before the choice of a research design is the goal of the research project. This chapter commences with the introduction of the goals and objectives of the present study, followed by a summary of the philosophical assumptions underpinning this research. Other methodological issues pertinent to understanding how the study was carried out would also be discussed. According to Creswell (2009) there are a number of paradigms or philosophical assumptions that influence the orientations of the researcher and the means by which they carry out research. Paradigms are frameworks for understanding the phenomena that researchers study (Babbie, 2007). Moreover, the chosen philosophical assumption reflects the researcher's thinking and epistemology of what they regard as both true knowledge, and how this knowledge should be studied. The mixed-method of research has been used in this study based on the combination of two philosophical assumptions - post-positivism and symbolic interactionism.

3.1. Goals and Research Questions

The introductory chapter included a concise rationale on the need to understand aspects of mental health among adolescents in the Northern region of Ghana from a positive psychological perspective. Hope, perceived social support and life satisfaction were specifically noted as constructs in need of exploration within the Ghanaian context.

One of the goals of this study is to test a model indicating certain hypothesised relationships between the above-mentioned constructs and mental health. The secondary aim of the study is to explore adolescents' experiences of these constructs and how they are engendered within the chosen context of research. The research questions include:

1. To what extent does the observed data fit the hypothesised model of mental health?
2. How are hope, perceived social support and life satisfaction engendered among school-going adolescents living in the Northern region of Ghana?

3. What are the generalised resistant resources utilised in the current context to cope with stress and ensure well-being?

The goals and research questions stated here imply that a mixed-method design should be adopted. This method of research combines quantitative measures and an in-depth exploration of the underlying constructions and subjective accounts of adolescents' experience of hope, perceived social support and life satisfaction.

3.2. Methodological Positioning

Under this section the author locates the chosen research design within the framework of two philosophical orientations. Given that the current study adopts a mixed-method design, to be discussed next, two philosophical assumptions, –post-positivism and symbolic interactionism, were chosen to provide a rationale for the use of this methodology. Post-positivism was adopted to satisfy the need to ascertain the statistical relations among variables, while symbolic interactionism was adopted to explain the need to understand participants' subjective experiences. These philosophical assumptions are discussed in depth below.

3.2.1. Mixed-method research

A sequential explanatory mixed-method design was adopted in the present study, which included the gathering and analysis of quantitative data (first phase), followed by the collection and analysis of qualitative data (second phase; Creswell, 2009). The second phase of the study was designed to build on the findings of the first phase of the study. When researchers use the sequential explanatory mixed-method design, they usually intend to give more weight and priority to the quantitative phase, and the mixing of the data occurs when the quantitative data informs the qualitative data (Creswell, 2009). Given that the major aim of the current study is to test a hypothesised model of relationships among variables, the quantitative phase was given more weight than the qualitative phase. Mixing of the data

occurred, when purposefully selected participants were interviewed with the aim of gathering qualitative data that could explain some of the significant relationships that were found in the hypothesised model. For example, the qualitative question exploring what makes learners satisfied in life could have provided further insight into why the structural path connecting perceived social support to life satisfaction was significant. It must, however, be mentioned that the qualitative phase was unable to adequately explain the full model, but it provided some understanding of the relationships observed. The shortcomings of both methods necessitated the use of a mixed-method design so that each phase would complement the limitations of the other.

Since the current study was a burgeoning area of study among adolescents in the Northern region of Ghana, it was necessary to explore mental health using a research design that would provide comprehensive information on this area. The mixed-method design also provided the opportunity to achieve the different aims of the study (Bryman, 2012), which included understanding the relationship among variables and exploring the subjective experience of these variables.

Apart from the type of mixed-method design, other issues must be considered when conducting a mixed-method research. According to Creswell and Plano Clark (2011) choosing mixed-method of research can either be determined prior to going to the field or it can emerge as the research process continues. The present study employed a fixed-method design, which according to Creswell and Plano Clark (2011), involves the decision to adopt both quantitative and qualitative methods at the onset of the research. Green (2007) describes that it is also important to state the level of interaction for a mixed-method research design. In this study the quantitative and qualitative phases were independent and were put together only to draw conclusions for the overall interpretation of the study.

Despite the benefits of the mixed-method of research, this method is not without its criticisms, chief among which is the possibility of the method posing some technical difficulties. These difficulties include deciding which phase has more weight, the timing, having the prerequisite skills, as well as the financial and time constraints (Creswell, 2009; Morgan, 2006). Additionally, mixed-method research tends to be anchored on separate philosophical assumptions that some experts might consider as mutually incompatible; that is, the combination of positivist orientations with constructionist perspectives (Morgan, 2006). As already explained, the philosophical assumptions combined in this study are complimentary in as much as they provide different explanations for the two phases of the study. Symbolic interactionism as a paradigm enabled the researcher to locate the quantitative findings within the subjective experience of the participants. It provided a context for understanding and conceptualising the relationships found in the study.

3.2.2. Post-positivist assumptions

For the quantitative strand, post-positivist assumptions were used as the underlying philosophical assumption. Post-positivist assumptions were developed as a response to the notion that it was difficult for social scientists to be totally indifferent while conducting research, and this paradigm concerns itself with some of the tenets of positivism such as reliability, validity, generalisability and quantification. It is also described as a philosophical assumption that emphasises the objective measurement of social issues (Hennink, Hutter, & Bailey, 2011). Apart from these, post-positivist researchers are interested in ensuring that the tools for conducting research are properly suited for the phenomena being studied (Crook & Garrat, 2011). Additionally, consideration of the context of the research is necessary in order to determine to what extent they may predict events in other but similar contexts. Similarly, Creswell (2009) describes post-positivist assumptions as those presuppositions that emphasise the existence of an objective reality and the need to develop numeric observations.

Essentially, post-positivism aligns itself with a need for a quantitative objective representation of social phenomena. Hypothesis testing and the use of theory also underlie this epistemological orientation to research.

Post-positivist assumptions espouse that the standards for reliability and validity of research findings is determined by the tools for collecting the data, moreover, these tools must be transparent, and the data gathered must be adequately managed (Crook & Garrat, 2011). As compared to pure positivism, the researcher must also foster a healthy relationship between himself or herself and those being researched.

This methodological positioning was particularly influential in the current study because of the use of the mixed-method of research. The combination of both quantitative and qualitative measures required that the researcher used tools that would produce valid data on the phenomena of study, and at the same time ensure the establishment of a working relationship with the research participants. In addition, post-positivism was chosen as the philosophical assumption underpinning the present study because of the precedence given to the quantitative aspects, and the use of instruments for measuring variables and assessing statistical results (Creswell & Plano Clark, 2011). Moreover, other requirements such as generalisability, adequate data management and the negotiation of meanings were relevant in the process of data collection and analysis. For instance, it was important to manage both the quantitative data and qualitative data using data management files and analysis tools such as the Statistical Package for Social Sciences (IBM SPSS) and ATLAS-ti (Muhr, 1991). Although, a post-positivist orientation underlies mixed-method research, Creswell and Plano Clark (2011) recommend that a different orientation should form the basis of the qualitative aspect of the study.

3.2.3. Symbolic interactionism

The qualitative strand of the present study was driven by interactionist assumptions. Interactionists emphasise that “meanings” are derived from social interactions, modified through the interpretive process adopted by the researcher and synthesised into knowledge of the construct being studied (Blumer, 1969; Crotty, 1998). Relatedly, symbolic interactionism stems from interpretive traditions that are concerned with understanding social phenomena from the experience of those involved and gathering information on the subjective interpretations that are attached to individual experiences (Hennink et al., 2011). The interpretive approach emphasises a socially constructed reality because individual actions take place within social, cultural and historical contexts (Hennink et al., 2011). Knowledge is thought to emerge from the meanings participants produce and reproduce as they constantly interact with each other (Blaikie, 2010). This approach emphasises putting oneself in the position of those being studied and understanding reality from their perspective (Crotty, 1998).

Symbolic interactionism was adopted as an epistemological position because the researcher was interested in understanding aspects of mental health (hope, perceived social support and life satisfaction) from the participants’ perspective. It was not enough to observe the structured relationships among variables without understanding the interpretations of these constructs from the perspective of those being studied. This was particularly important since the phenomena being studied were relatively new to the context of the research. The qualitative phase of the current study was focussed on eliciting interpretations that adolescents attached to the constructs under study and how these constructs were engendered. The research process was regarded as a form of interaction, where participants were allowed to describe the constructs under study based on their experience and personalised interpretations. The purpose of the qualitative phase was to highlight the influence of the

individual's context on the experience of hope, perceived social support and life satisfaction, which could not be demonstrated using quantitative methods.

The use of a mixed-method design enabled triangulation, providing the researcher an opportunity to investigate a problem from different perspectives (quantitative or qualitative) (Creswell & Plano Clark, 2011; Plowright, 2011). Additionally, the different sources of information increased the validity of the study. This was particularly important in the context of the current research where measurement scales that were developed in the West were used. Given the importance of context for qualitative studies, a brief discussion of the physical and social setting where this research took place is presented below.

3.3. Setting of the Study: Northern Region of Ghana

The Northern region of Ghana is one of the 10 regions in the country and the largest with respect to land mass, spanning 70, 383 square kilometres. It borders with the Upper West and Upper East regions to the north and Brong-Ahafo and Volta regions to the south (www.Ghana.gov.gh) (see Figure 3.1 for the map of Ghana). Although, it has been identified as the region with the largest land area, the population of this region is only 9.6 percent of the population of the country. The Northern region is known for its high involvement in the agricultural sector however, most individuals are subsistence farmers.

The predominant religion in the Northern region of Ghana is Islam (56.2%) and the literacy rate for those 15 years and older is approximately 22% of the population. Only 6.1% of the population are gainfully employed, while 68% of the population are economically active although self-employed. These figures have implications for some of the findings in the qualitative phase of the study.



Figure 2.1. Represents the political map of Ghana based on the regional divisions (Google Maps, 2012)

Approximately, 22.9% of the population of the Northern region are unpaid family workers (“Ghana Northern Region,” n.d.). The number of self-employed workers is higher in districts that are less developed and mostly agrarian in nature. As a result of the reliance on subsistence farming, low literacy rates and relatively low numbers of gainfully employed individuals, the Northern region has been lagging behind in development. The disparity in development between the Northern and Southern parts of the country has historical roots in colonial policies that ensured that the North was a labour reserve for the South (Shepherd, Boadi-Gyimah, Gariba, Plagerson, & Musa, 2006). Unfortunately, post-colonial policies have inadvertently failed to break those trends (Agyei & Ofosu-Mensah, 2009; Shepherd et al., 2006). This had led to poverty in the Northern region (Anarfi & Kwankye, 2005; Awumbila & Ardayfio-Schandorf, 2008) and delayed development in various areas.

The government schools that were selected to participate in the current study included Nyaniba Senior High School, Salima Senior High School, Teye Kojo Senior High School, Christian Youth Senior High School, With God Senior High/Technical School, Nurudeen Secondary School and Nyele Secondary School². Pseudonyms were used to replace the actual names of the schools in order to protect the identity of the participants. These schools were under the administration of the Ghana Education Service, Northern region, so permission was sought and granted from this institution prior to the commencement of the study. These schools were situated in urban and semi-urban settings. There were accessible roads in most of the communities where these schools were located as well as amenities such as transportation, hospitals, business centres. Some of the observed differences in the standards of the classrooms across the seven schools included the presence or absence of facilities such as science laboratories and well-furnished libraries. It must, however, be noted that the conditions in Northern region schools were generally not as good as the schools in the Southern part of Ghana, for example the capital city of Accra.

The author observed that the general school population was skewed towards males with relatively less number of females. The average class size was 50 but there were classes with as many as 100 learners. The major form of transportation in the communities where these schools were located was motor bikes and bicycles.

3.4. Research Design and Implementation

In this section, the author presents a description of the procedures that were undertaken to gather both quantitative and qualitative data. The instruments that were used to collect the data have also been described.

² These names are pseudonyms.

3.4.1. Population and sampling

For the larger quantitative phase, a modified version of a two-stage or multi-stage cluster sampling was used (Bryman, 2008) (see Figure 3.2). This process typically involves the preliminary sampling of clusters or groups of the unit of the population the researcher is interested in, followed by a further probability sampling of participants from each group or cluster (Bryman, 2008). The first stage of sampling involved the random selection of seven schools. In order to this, the author retrieved necessary information on the administrative divisions of the Northern region Ghana, which comprised the metropolitan, municipality and district assemblies. Necessary information on the classification of schools across these administrative divisions was also accessed from internet sources and selection was made from this list of public schools in the region, which comprised 34 schools. The author consulted with a local expert regarding which schools were located in the various administrative divisions and based on that, seven schools were either purposively selected or randomly selected from each division.

The number of schools (seven) was determined by the number of schools present in each local government division LGD (cluster 1). The author decided on seven schools because this number allowed for the representative sampling of schools across the metropolitan, municipality and districts. The number of schools was also influenced by the feasibility of data collection within the allocated time period. It must be noted that this selection was, in some cases, subject to the availability of schools for the study from the three (LGDs; cluster 1). Two schools were purposively selected from Tamale, the only metropolitan city in the Northern region, using the information on the list of schools gathered. Only two schools were selected out of the nine public schools in the metropolitan in order to ensure that the number of schools chosen across the other administrative divisions were representative of that specific division. One school (out of a total of two public schools) was

purposively selected from Nayira³, which also represents the major municipality. Finally, four schools (out of a total of 23 public schools) were randomly selected from a total of 24 district assemblies. The author compiled a list of all the public schools in the 24 districts that were available online and randomly selected four by dividing the list and selecting every 8th school. It is noteworthy that more schools were selected from the districts because of its diversity and also to increase the representativeness of the sample for the Northern region population of schools (cluster 2).

As a result of financial and time constraints, private schools were not selected and a limited number of schools were chosen to be part of the study. In addition, given that there were 24 districts, the author would like to acknowledge the fact that certain districts were not represented in the study, as a result of the constraints highlighted above. Figure 3.2 shows the stages of sampling of the schools in the Northern region.

For the qualitative phase of the study, 18 adolescents out of the total number of participants were purposively selected across six of the schools. The inclusion criteria are described in Section 3.4.3.2.

³ Nayira is a pseudonym for a municipality because there were relatively fewer public schools at this location and a mention of the municipality would render the schools easily identifiable. The chosen school was purposively selected because it was the only public school in the municipality that agreed to participate in the study.

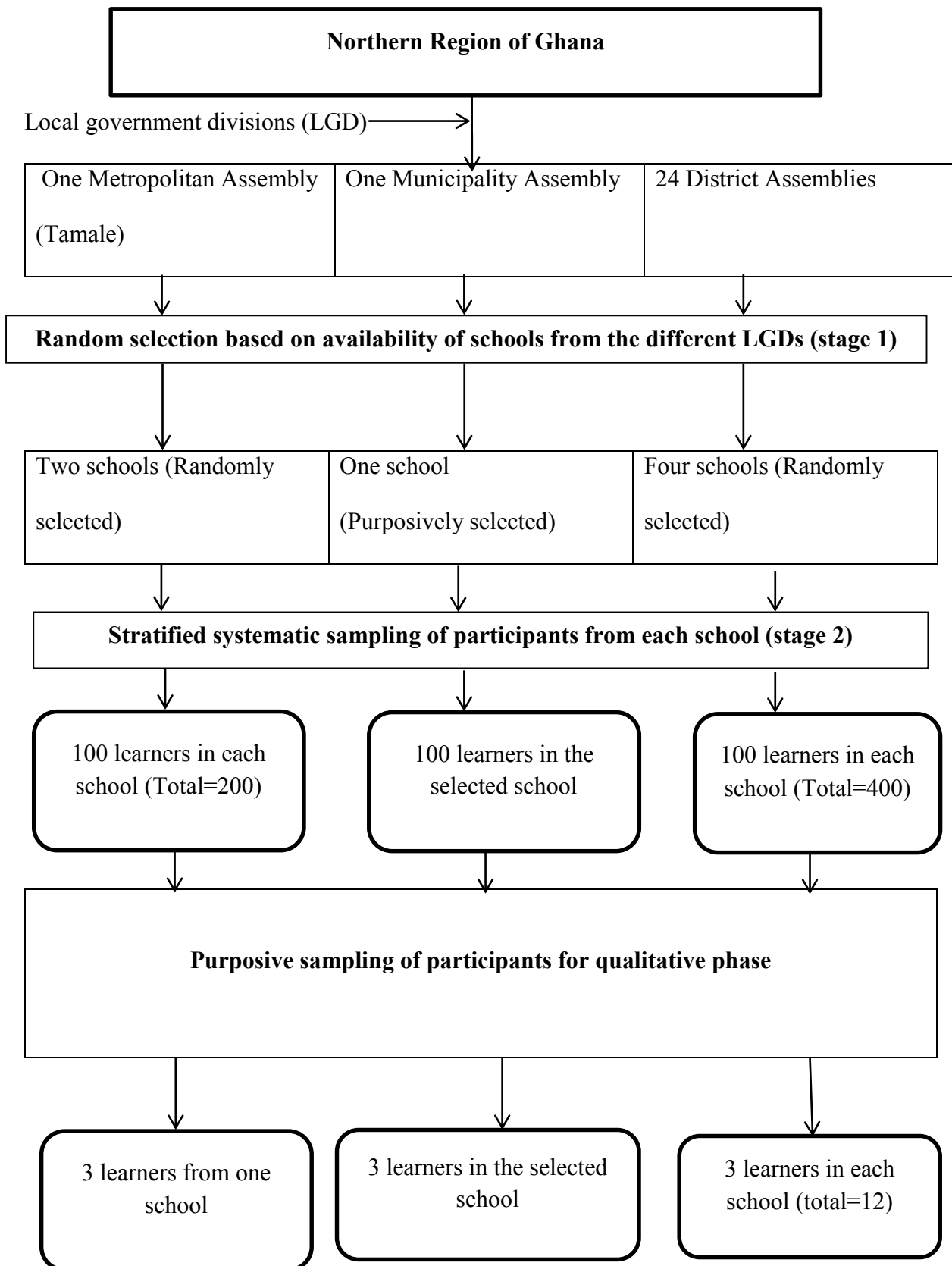


Figure 3.2. Diagrammatic representation of a modified multistage sampling

3.4.2. Participants

The inclusion criterion for participants was that they had to be enrolled in one of the senior high schools (SHS) that were randomly selected from the population of senior high schools (SHS) in the Northern region of Ghana. A total of 717 participants⁴ from Grades 11 and 12 (SHS2 and SHS3, respectively within the Ghanaian context) were included in this study. This sample size was chosen because of the need to ensure representativeness across the seven schools. The sample size met the requirement of using structural equation modelling (SEM) as a method of analysis. This method of analysis generally requires a large sample size, which is determined by the number of parameters under investigation (Weston & Gore, 2006; Kline, 2011). In order to ascertain the appropriate sample size, the author calculated the number of parameters to be estimated (by adding the error variances and factor loadings), and this was 32, multiplied by the recommended number (20) of participants per parameter to be estimated (Kline, 2011). A proposed total of 700 participants was used because of the intention to ensure representativeness across the LGDs. Apart from the Christian Youth Secondary School that enrolled only male learners, the rest of the schools enrolled both male and female learners.

In each of the schools, the author inquired about existing class divisions⁵. The common class divisions were Business, General Arts, Science and Home Economics. Each of these could be further divided depending on how the administration decides to deal with the class sizes. The author endeavoured to sample learners from as many divisions as possible. A total of 100 participants were selected from each school with two extra participants from each of the first four schools (8) (Nyaniba, Salima, Teye Kojo and Christian Youth Senior

⁴ Oversampling of participants from each school increased the proposed sample to 717.

⁵ Class divisions refer to how senior secondary schools are structured in Ghana.

Secondary Schools) and three extra learners from the last three schools (9) (With God, Nurudeen and Nyele senior secondary schools). The oversampling of participants was not originally planned, nonetheless the extra numbers of learners was not removed because of the missing data discovered during analysis. There were 50 participants from Grade 11 and the same number from Grade 12 classes. The class registers of each grade were used to select a random sample of participants to participate in the study. Depending on the class size, the 3rd, 5th, or 10th learner was selected. As previously mentioned, there were relatively fewer girls in most of the schools. There were also a lot of absentees in some classes as a result of the Salah celebrations (Muslim fasting celebrations) and failure on the part of some learners to pay the required school fees for the term. The number of participants that were selected from each division was relative to the class size in order to get a representative number of learners for each grade. There were also some class divisions that had on-going learning sessions during the time of participant selection, as result they could not be part of the study.

The original sample of participants 717 consisted of 429 males and 286 females, approximately, 60% and 40%, respectively due to two instances of missing data (See Table 3.1). Eight of the learners (1.1%) were below 15years of age, 210 were aged between 16 and 18 years (29.3%), and 498 learners (69.6%) were in the age ranging between 18 years and above . The sample comprised 360 (50.2%) participants from Grade 11 and 357 (49.8%) from Grade 12. Given that the data were collected in the Northern region of Ghana, which is predominantly Islamic, 508 learners (70.9%) reported that they practised the Islamic religion, while 205 learners (28.6%) reported their religion to be Christianity. The remaining two participants (0.3 %) had no specified religion they followed, and there were two missing data in respect of this variable.

Regarding parental presence at home, 438 participants (61.4%) lived with both parents, while 275 participants (38.6%) did not live with both parents, the remaining three

represented missing data. Participants that had less than four members living in their household were 122 (17.2%), those who had between 5-10 individuals living in their household were 489 (68.8%), and participants with above 10 individuals other than their immediate family living in their household 100 (14%), six of the learners did not answer this question. The demographic data also included information on where participants resided in the Northern region, but this information will not be presented because it was difficult to formulate a comprehensive summary. Moreover, the demographic information provided regarding where participants resided varied from participant to participant.

Given that the description of participants provided in the preceding paragraphs include the 18 participants who participated in the quantitative phase, descriptions of participants for the qualitative phase would not be provided.

3.4.3. Data collection procedures

The procedure for data collection is presented below. Most of the institutional heads granted permission for research prior to the author's arrival, with the exception of three schools that insisted on meeting the author before granting permission. For all the schools, the author met with the headmasters and mistresses to introduce herself and present the letters of permission the schools had addressed to the author through a local contact in Tamale. The author had to elaborate further the purpose and procedure of the research and then fix the dates for the distribution of consent forms and actual data collection.

Table 3.1

Demographic Characteristics of School-going Adolescents in the Present Study

		<i>N</i>	(%)
Gender	Male	429	(60)
	female	286	(40)
Age	15yrs and below	8	(1.1)
	16-18yr	210	(29.3)
	18+	498	(69.6)
Level of education	Grade 11	360	(50.2)
	Grade 12	357	(49.8)
Religious affiliation	Christian	205	(28.6)
	Muslim	508	(70.9)
	other	2	(.3)
Living with both parents	yes	438	(61.4)
	no	275	(38.6)
Number living in household	Below 4	122	(17.2)
	5-10	489	(68.8)
	Above 10	100	(14)

Similar data collection strategies were adopted in all the seven schools with few exceptions that would be discussed when necessary. It must be mentioned that the author proposed to include participants from grades 10, 11 and 12 in the study but could not. This is because the first year (Grade 10) learners were yet to report to school as a result of delays in the allocation of learners to schools, and the determination of the school fees to be paid by

learners in government schools. For this reason, this proposed group of participants were excluded from the study. Although the qualitative phase followed immediately from the quantitative phase, these have been separated for analytical purposes.

3.4.3.1. Quantitative phase

The school authorities informed the author during the initial visit to the school that most learners in the chosen grades were of the ages of 18 or above and for this reason could provide the needed consent before commencing the study. The learners who were selected and were identified as being below the ages of 18, were given consent forms requesting that their parents and legal guardians provided consent in addition to their own assents. There was a 100% return rate of all consent forms. After the selection of 50 participants from a particular grade, the learners were moved to an available large hall for the questionnaires to be administered. These halls comprised the library, assembly hall or the dining hall in the case of With God Secondary School. During each session of the data collection there were 3 personnel present. These included the author, an assistant researcher from the University of Development Studies and a teacher from the school. The research assistant was trained and debriefed on the content, aim of the research and the administration of the questionnaire. The process commenced with retrieving the informed consent and assent forms from the participants. After these forms were collected and the participants consented to have understood the research and were ready to participate, the questionnaires were distributed. It took learners an average time of 60 minutes to complete the questionnaires. Data was collected from October 2013 to February 2014.

3. 4.3.2. Qualitative phase

On completing the questionnaires, the author purposively selected three participants from each school for the second round of the data collection, with the exception of Nurudeen Secondary School. Although the specifications of the research protocol (as approved by

various committees at Stellenbosch University, South Africa) stipulated that participants will be selected from all the seven schools, the assistant headmaster of this school refused the author the opportunity to embark on the second phase of the research, arguing that the learners were too immersed in the learning curriculum to participate further in the study. Moreover, even the author's request for an opportunity to return for the interviews at a more convenient time for the school, was denied. In addition to providing access to the learners in each of their schools, the headmasters and mistresses at times acted as 'gatekeepers' into the school community. Participants for the qualitative phase were purposefully selected irrespective of the initial level of mental health or scores on the other constructs. They were rather selected based on their age, gender, grade and availability in order to ensure maximum variation. Selection was also done in order to ensure that participants were equally representative of the remaining six schools. The total number of learners in the second round of face-to-face interviews was 18 participants with three learners each from six schools, respectively. The consent forms that were issued at the beginning of the data collection process included consent to be part of an in-depth interview if chosen by the researcher. Therefore, there was no need for additional consent forms to be administered, nonetheless additional efforts were made to inform participants that they could still drop out of the study if they did not want to partake in the second phase. All the selected participants agreed to be part of the qualitative phase of the study.

The author explained the purpose of the interview although a detailed description was already found in the consent forms. The process of interviewing commenced with the author asking the learners to describe themselves and the things they loved doing. The purpose of such questions was to create adequate rapport and encourage participants to express themselves freely. After attempting to create rapport, the author proceeded to discuss questions on hope, perceived social support, life satisfaction and resources for coping (See

Appendix B). The interview sessions were conducted solely by the author without the presence of the teachers to ensure reliability of the data being gathered and to minimise intrusion during this process. The interviews lasted approximately 45 minutes.

After each interview, the author expressed her gratitude and offered some snacks to the participants for their time and cooperation throughout the interview process. The heads of a number of schools were interested in knowing how their learners performed during the interview process. The author had to explain to these personnel again that the purpose of the research was not to examine or assess the learners but a process of gathering information from the learners. Although English was not the mother tongue of these participants (Dagbani is the language predominantly spoken in this region), the interviews were conducted in English. Apart from English being the major language of instruction in Ghanaian schools, participants also expressed preference for the interview sessions being conducted in English, against the backdrop of, and despite, the communicated assurance of the availability of a research assistant (a graduate student from the University of Development Studies, Ghana) whose role was to assist with translation of interview material from English to Dagbani. While it was anticipated that some of the participants might opt to be interviewed in Dagbani during the interview sessions), none of them expressed the need to have the questions translated to Dagbani for the interviews. The first author as the interviewer, however, constantly ensured that reports of participants were adequately captured. The teachers who assisted with the data collection process were given a lunch allowance, while the graduate student who worked as a research assistant was given a small stipend.

3.4.4. Measuring instruments

Both quantitative and qualitative measures were used in the current study. For quantitative measures, four scales⁶ (namely, the Integrative Hope Scale, the Multidimensional Student Life Satisfaction Scale, the Multidimensional Scale of Perceived Social Support, and the Mental Health Inventory–38, to be discussed in detail below) were used. A follow-up qualitative measure (interview schedule) with 15 open-ended questions was also administered.

3.4.4.1. Demographic questionnaire (see Appendix A)

A demographic instrument was used to capture information on the demographic variables of participants, including personal information on the participants' age, gender, current school grade, religious affiliation and family size. Personal identifiers such as grade, investigator assigned identification numbers, age, and sex was used to facilitate the selection of participants for the follow-up interviews.

3.4.4.2. Integrative Hope Scale (IHS; Schrank et al., 2011)

To measure participants' belief in positive future outcomes, the IHS was used. This is a 23-item scale that has been used to tap into an individual's level of confidence in the future and the presence or absence of a positive future orientation (Schrank et al., 2011). The IHS has four dimensions, namely trust and confidence, positive future orientation, social relations and personal value and lack of perspective. This tool is a self-rating, six-point Likert scale that ranges from 1 (strongly disagree) to 6 (strongly agree). It provides both an overall score and four dimension scores that is obtained by summing up the individual items. The scores

⁶ I obtained permission from the respective authors, Dr. Schrank Beate and Dr. Zimet Gregory, for the use of the two measures for research purposes (namely, the Multidimensional Scale of Perceived Social Support and the Integrative Hope Scale), both which were not in the public domain.

range from 23 to 138, with higher scores representing higher levels of hope. The scale has high internal consistency ($\alpha = 0.92$), is negatively correlated with depression ($r = -0.68$) and positively correlated with quality of life ($r = 0.57$) (Schrank et al., 2012; Schrank et al., 2011). The internal consistency based on the Cronbach's alpha of IHS for the present Ghanaian sample was .79.

3.4.4.3. *Multidimensional Student Life Satisfaction Scale (MSLSS; Huebner, 1994)*

To measure participants' assessment of their individual levels of life satisfaction, the MSLSS was used. This scale was designed to provide a multidimensional profile on children's judgments of life satisfaction. This is a 40-item scale that has been used to tap the global evaluation of an individual's life (Huebner, 1994; Pavot et al., 1991). The scale provides information on important domains for children's life satisfaction such as school, family, friends, living environment and self (Huebner, 1994), and can be used across a wide range of ages including grades 3-12.

The response options range from 1 (never) to 4 (almost always). Negatively-keyed items were reverse scored. Higher scores thus indicate higher levels of life satisfaction throughout the scale. The reliability co-efficient for the MSLSS ranges from .70 to .90 (Gilman & Huebner, 2006; Gilman et al., 2000; Huebner, 1994). Convergent and discriminant validity have been demonstrated through correlations with other self-report well-being indexes (Gilman & Huebner, 1997; Huebner, 1994). The MSLSS in present study had a Cronbach's alpha internal consistency of .69.

3.4.4.4. *The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988)*

To measure participants' perception of the availability of social support, the MSPSS was used. This is a 12-item scale that has been used to tap into the individuals' perception of how much they receive social support from family, friends and significant others. This scale

is divided into three factors showing the sources of social support, namely family (FAM), friends (FRI) and significant other (SO). The scores range from 1 to 7, with higher scores indicating higher levels of perceived social support (Zimet et al., 1988). The MSPSS has a reliability score (Cronbach's alpha coefficient) ranging from .70 to .88 (Bruwer, Emsley, Kidd, Lochner, & Seedat, 2008; Cheng & Chan, 2004; Zimet et al., 1988). The test-retest reliability for MSPSS was .85, indicating a good internal reliability and stability over time. Construct validity was determined by demonstrating its correlation with depression. Each of the subscales were significantly inversely related with depression as was the whole scale ($r = -.25$) (Zimet et al., 1988). The internal consistency based on the Cronbach's alpha of MSPSS for the present Ghanaian sample was .81.

3.4.4.5. Mental Health Inventory-38 (MHI 38; Veit & Ware, 1983)

To measure participants' state of mental health, the MHI-38 was used. This is a 38-item scale that has been used to assess the individual's level of psychological distress and well-being (Veit & Ware, 1983). The MHI-38 assesses several aspects of mental health including anxiety, depression, behavioural control, emotional ties, positive affect, and life satisfaction and has a Cronbach alpha coefficient of .93 (Veit & Ware, 1983). The MHI-5, which is the shorter version has an internal consistency of .82 (Marques et al., 2011). Other versions of the MHI including SF-20 (Stewart, Hays, & Ware, 1988), and SF-36 (Ware & Sherbourne, 1992) were all found to have Cronbach alphas ranging from .67 to .95. All of the items except two (items 9-28) were scored on a six point scale (1-6). These two were scored on a five-point scale (1-5). The MHI-38 may be aggregated into two global scales, namely, psychological distress and psychological well-being. The scale can also be aggregated into a global mental health index.

This scale has a relatively complicated scoring scheme because the subscale and global scales may require recoding depending on the underlying construct being measured.

Higher scores indicate greater psychological well-being and relatively less psychological distress, with raw scores ranging from 38 to 226. Mental health, in the present study, was measured using the two global subscales and their Cronbach alphas were .72 and .74 for psychological well-being and psychological distress, respectively.

3.4.4.6. Qualitative interview schedule (see Appendix B)

A qualitative interview schedule was used to elicit subjective experiences of the chosen aspects of mental health. The interview schedule was divided into five subsections. The first section included questions that allowed participants to provide a general description of their personality and overall assessment of life. This was followed by questions exploring interpretations, sources, experiences of hope as well as future aspirations and goals. Questions exploring the participants' conceptualisation of life satisfaction, experiences of life satisfactions and experiences that resulted in dissatisfaction with life were also asked. The interview schedule also explored the available social support systems that participants engaged with on a daily basis. Questions on the perception of adequacy and inadequacy of these support systems were also asked. The last subsection related to questions on resources for coping.

3.5. Data Analyses

This subsection is also divided into both quantitative and qualitative sections for the purpose of clarity.

3.5.1. Quantitative data

The analysis of the quantitative data was done using the IBM Statistical Package for the Social Sciences (SPSS) 21.0 and MPLUS, (Muthén & Muthén, 1998-2006) a statistical tool for carrying out SEM.

A rigorous procedure was carried out during the preliminary analysis of the data, with the aim of creating item parcels from the items on the various subscales. These subscales

were designed to measure their underlying latent variables. The use of item-parcels have been found to reduce error variance and it is suitable when the focus of the analysis is the structural model (Bandalos, 2002; Little, Cunningham, Shahar, & Widaman, 2002). Item parcels also reduce the effects non-normal data on the model fit. As already indicated, the first phase of the preliminary analysis involved creating item parcels from subscales, which were made up of individual items measuring an underlying construct. A bivariate correlation was performed on each of the individual items for each subscale in order to ensure that the scales had been re-coded in the correct direction. Bivariate correlations were followed by performing a test of normality (skewness and kurtosis) for each item that appeared on all the original subscales. The current study adopted West, Finch, and Curran's (1995) recommendation of the values of -2 to +2 for skewness, -7 to +7 for kurtosis, in order to ascertain the normality of the data. Items that failed on skewness and kurtosis were not further analysed. An exploratory factor analysis (EFA) was performed to determine which individual items loaded strongly onto their respective original subscales. This was necessary because there was no prior pilot or cognitive testing of the instrument, resulting in the absence of information on the validity of the scales for the Ghanaian context. For the construct of hope, EFA was performed on the individual items of each of the following subscales: trust and confidence, lack of perspective, positive future orientation and social relations and personal value.

Exploratory factor analysis was performed on the individual items of each of the following subscales for measuring life satisfaction, which included family, friends, school, living environment and self. The same procedure was adopted for significant others, family and friends, which were the subscales of perceived social support. The mental health inventory was split into two global scales namely: psychological well-being and psychological distress and these were used as latent variables. Psychological well-being

comprised the following subscales: general positive affect, emotional ties and life satisfaction. Psychological distress comprised anxiety, depression and loss of behavioural and emotional control.

The method of maximum likelihood (ML) was used to extract factors with *eigen* values greater than 1.0. Maximum likelihood was used because a similar method (Robust Maximum Likelihood) was used in carrying out the confirmatory factor analysis (CFA) in Mplus. In addition, *direct oblimin* was used to ensure that if two factors emerged, each of these two factors would be related to each other. A reliability analysis was then performed across all the items that were retained after the tests for normality and the EFA. Following this, the mean composite scores and standard deviations were computed for each of the item parcels (after the removal of individual items that did not load strongly on the factor structure). Bivariate correlations were then performed on the item parcels of each of the latent variables in order to ensure that the parcels acting as indicators for a specific latent variable were strongly correlated with one another.

The rationale behind using these remaining items to calculate the composite score for each item parcel was that the method of SEM is built on the premise that manifest variables need to not only pass the criterion of normality, but must also represent a strong indicator of the latent variable they intend to measure (Weston & Gore, 2006). Using items that do not strongly measure its underlying latent variable would render the model meaningless. Appendix C shows the items that were retained across all subscales after the first phase of the preliminary analysis for each latent variable.

In the second phase of the preliminary analyses, each of the parcels was treated as *individual indicators* for their underlying factors. Tests for normality were again carried out on all of these *individual indicators* for each latent variable. No indicators were dropped after the test for normality. An EFA to determine whether the indicators measured each of the

underlying latent variables they intended to measure was also performed. It was found that all the item parcels loaded onto their respective factors with the exception of “school” for the latent variable life satisfaction. This indicator was dropped from further analysis. In addition, the subscale “lack of perspective” was dropped because it loaded poorly onto hope. The process of dimension reduction showed that 66.24% of variance was explained by the remaining indicators measuring hope (see Table 3.2). When lack of perspective was included, the variance explained by the indicators was reduced to 49.97%. The indicators produced a factor structure in the order of trust and confidence, positive future orientation, social relations and personal value and lack of perspective, which had a factor loading of $< .30$.

As already mentioned, the “school” indicator of life satisfaction produced a multiple factor structure so it was dropped from further analysis. Variance explained was 56.12% when school was included in the factor structure, but without this indicator the variance explained was 41.47%. This indicator was still dropped because it yielded multiple factors instead of a single factor, which is life satisfaction. The order of the single factor structure without “school” was friends, family, self and living environment. It must be mentioned that the indicators lack of perspective and school were included in the first measurement model in order to ensure that the decision to drop them did not negatively impact the model fit indices. The indicators for perceived social support had a total variance explained of 60.59%. The order of the factor structure was family, significant others and friends.

A single factor structure emerged for psychological well-being. The total variance explained was 52.63% and the factor structure was in the order of general positive affect, emotional ties and life satisfaction. Lastly, the indicators for the latent variable of psychological distress also produced a single factor structure with a total variance explained of 63.66% in the order of anxiety, depression and loss of behavioural and emotional control. Bivariate correlations (see Table 4.1) were performed with all the indicators simultaneously

to determine whether an indicator measuring an underlying latent variable had stronger correlations with other indicators measuring the same latent variable. This was compared to the correlations between those indicators (measuring the same factor) and other indicators measuring different latent variables. This pattern was true for all the indicators except “family” on the life satisfaction subscale. Reliability analysis for the remaining item parcels for each latent variable provided Cronbach alphas of .79, .69, .81, .72, and .74 for hope, life satisfaction, perceived social support, psychological well-being and psychological distress, respectively.

Table 3.2

Percentage of Variance Explained by Each Factor Structure and their Respective Cronbach Alphas

Latent variables	% of Variance explained by factor structure	Cronbach alpha
Hope	66.24%	.79
Life satisfaction	41.47%	.69
Perceived social support	60.59%	.81
Psychological well-being	52.63%	.72
Psychological distress	63.66%	.74

An EFA was also performed on all the item parcels that were retained, using maximum likelihood and direct oblimin, and found that the pattern of factor loadings supported the uni-dimensionality of each latent variable. Each of the indicators loaded onto their respective latent construct that they intended to measure. However, the “family” subscale for life satisfaction loaded marginally stronger onto the psychological well-being latent construct than it did on the life satisfaction latent factor. The “family” subscale was retained under the life satisfaction latent factor because of the theoretical underpinnings of

the hypothesised model. Item parcels were finally summed up to determine the total mean score for each latent variable. See Table 3.3 for the pattern matrix showing the factor loadings of all the indicators on their respective latent constructs.

Table 3.3

The Pattern Matrix of Indicators and their Respective Factors.

	Factors				
	1	2	3	4	5
LSS1	.85				
LSS4	.26	-.12			
LSS3	.16				
PD2		.71			
PD1		.71			
PD3		.64		-.15	
HOPE1			-.82		
HOPE2			-.72		
HOPE3			-.57		-.10
PWB1				.73	
PWB2				.57	
PWB3				.29	
LSS2	.19		-.11	.20	
PSS2			-.12		-.69
PSS1					-.69
PSS3	.26			-.11	-.46

Note: HOPE1 = Trust and confidence subscale for hope, HOPE2 = Positive future orientation for hope, HOPE3 = Social relations and personal value subscale for hope, LSS1 = Friends subscale for life satisfaction, LSS2 = family subscale for life satisfaction, LSS3 = Self subscale for life satisfaction, LSS4 = Living environment subscale for life satisfaction, PSS1 = Family subscale for perceived social support, PSS2 = Significant others subscale for perceived social support, PSS3 = friends subscale for perceived social support, PWB1 = General positive affect for psychological well-being, PWB2 = Emotional ties subscale for psychological well-being, PWB3 = life satisfaction subscale for psychological well-being, PD1 = Anxiety subscale for psychological distress, PD2 = Depression subscale for psychological distress, PD3 = Loss of behavioural control subscale for psychological distress.

A two-step approach involving the testing of a measurement model and a structural model (Anderson & Gerbing, 1988; Ullman, 1996; Weston & Gore, 2006) was used. The measurement model component of the hypothesised model used in this study comprised the

latent variables of perceived social support, hope, life satisfaction, psychological well-being, psychological distress with 16 indicators and their associated error terms (see Figure 3.3). The figure also shows the covariance among the latent variables. A CFA was performed using Mplus to confirm that each indicator measured only the latent variable that it intended to measure and that there were no cross-loadings. Two confirmatory factor analyses were performed; the first tested a measurement model that included “lack of perspective” and “school” subscales. The second CFA did not include the above-mentioned subscales. These two confirmatory factor analyses were performed in order to determine which measurement model was a better fit for the observed data. Another confirmatory factor analysis was performed with “school” subscale included in the measurement model. The measurement model with the best fit indices was used in estimating the structural relations among the variables.

Furthermore, the indicator with the strongest factor loading was fixed at one (which was the default for Mplus) and the rest of the other indicators were estimated. The method of robust maximum likelihood (MLR) was adopted in testing all the measurement models. Standardised modification indices were also considered in order to find theoretical ways of improving the measurement model. Several comparative fit indices were reported to determine whether the measurement model had a good fit. These were chi-square (Bollen, 1989); Bentler's (1990) Comparative Fit Index (CFI); Steiger's Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), including the associated 90% confident interval (90% CI); and the Standardised Root Mean Square Residual (SRMR).

In order to deal with missing data, Mplus employs the method of maximum likelihood which assumes that data are missing at random. This method offers a better approach to list wise and pairwise deletion and its estimates are asymptotically unbiased, thus providing

efficient and reliable estimates (Allison, 2003; Weston & Gore, 2006). Additionally, missing values were also replaced with a number that did not occur in the data.

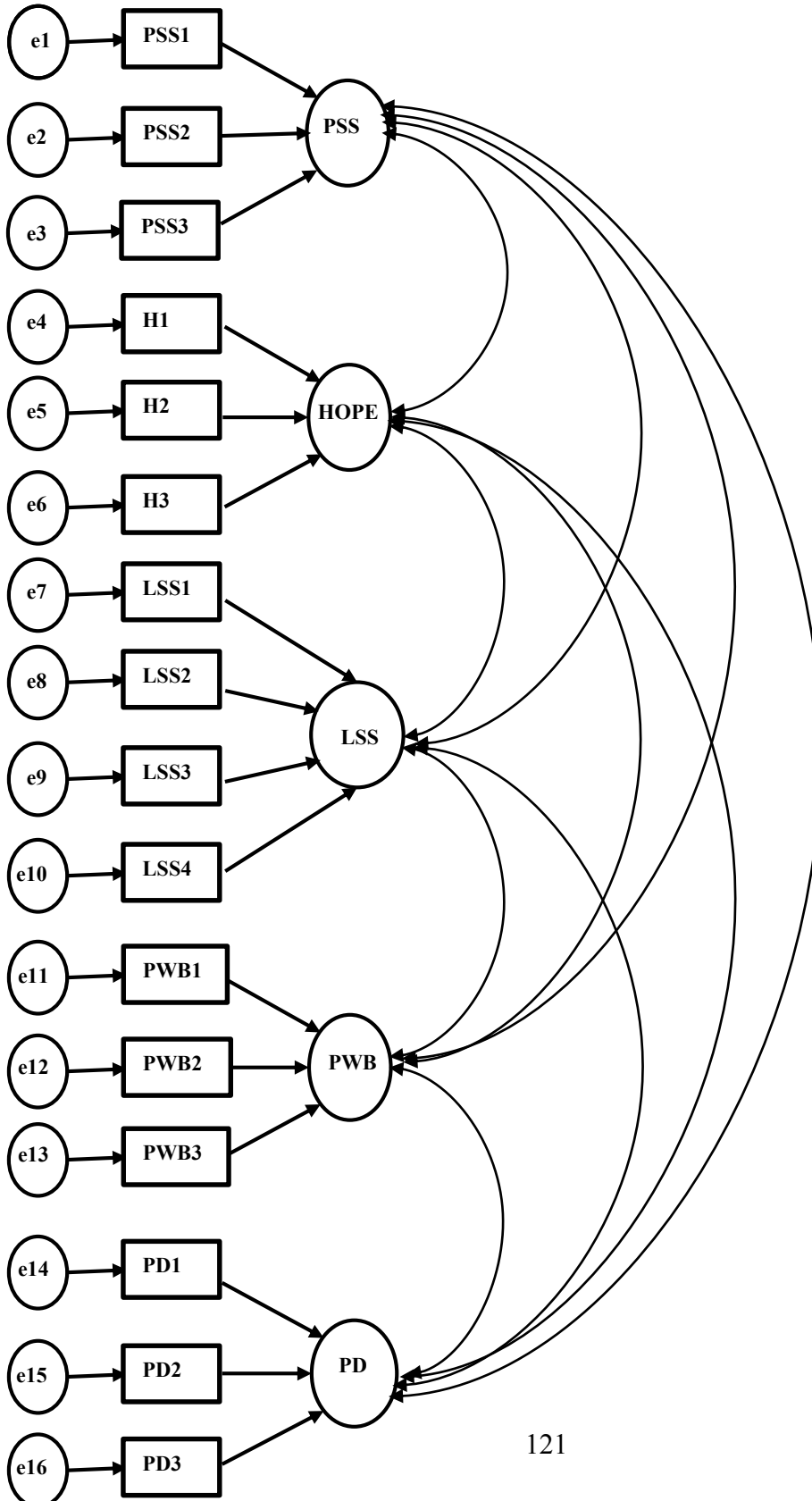


Figure: 3.3. Measurement models with their respective indicators and error terms

Note: PSS-Perceived social support, H-Hope, LSS-Life satisfaction, PWB-Psychological well-being, Psychological distress, e-Error terms

The structural model comprised the relationships across the latent variables and the disturbance terms associated with the endogenous variables. A method of maximum likelihood and a 1000 bootstrapping was applied to the output data (Shrout & Bolger, 2002). Fit indices that were reported for the structural model were similar to those in the measurement model. Figure 3.4 is an illustration of the hypothesised structural model.

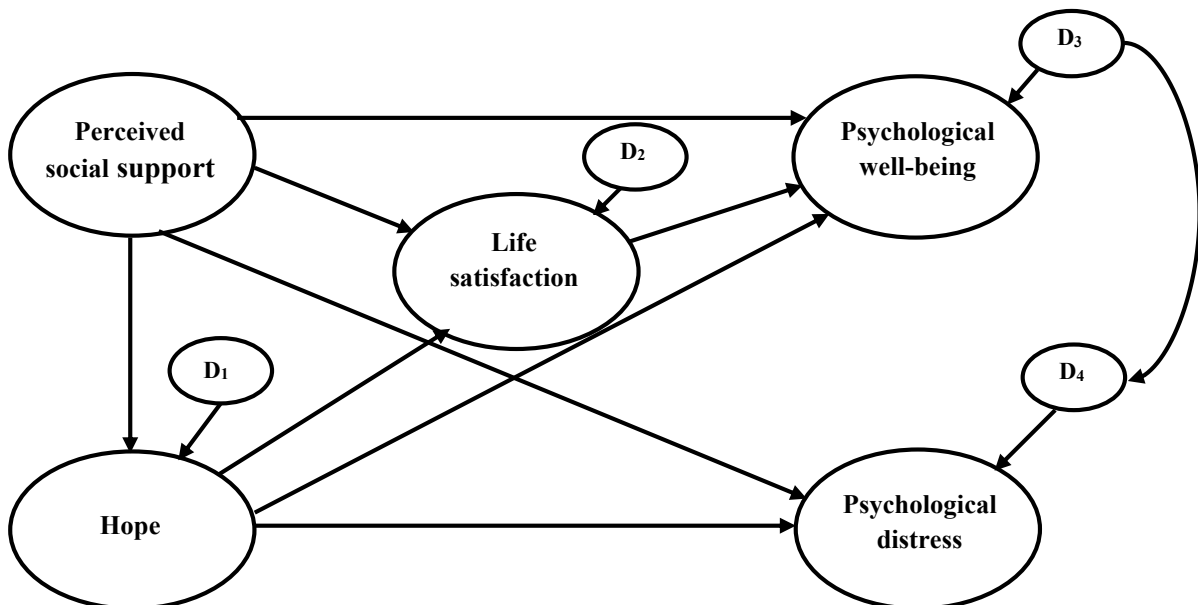


Figure 3.4. Hypothesised structural model with associated disturbance terms

One of the aims of the current study was to compare males and females on the hypothesised model. In order to make this comparison, the measurement model was compared across gender to determine whether the measurement model was equivalent (metric invariance) across both groups. This was necessary before proceeding with any meaningful group comparison of the structural relationships among latent variables (Vanderberg & Lance, 2000; Van de Schoot, Lugtig, & Hox, 2012). A measurement invariant that

determined whether constructs and their respective items had similar loadings for both males (reference group) and females (comparison group) had to be established. For the baseline measurement model (least restrictive model), the equality constraints of the intercepts in the comparison group was freed up, while the latent means for this group was constrained to be fixed to zero, making the comparison group equal to that of the reference group. In the baseline measurement model, the factor loadings for both groups were allowed to be freely estimated. Furthermore, the baseline measurement model was compared with a more restrictive measurement model, which constrained the factor loadings of both reference and comparison groups to be equal. For the restrictive model, the intercepts in the comparison group were allowed to be freely estimated and the equality constraints of the means fixed at zero for both groups.

The model fit of the restrictive and baseline measurement models were then compared to determine whether the change in fitness was significant. Although, the restrictive model produced a worse fit, the Satorra and Bentler's (1994) correction model was used to determine if the corrected chi-square difference value was significant. It was found that the change in model fit was insignificant ($p > .05$) meaning that the reduction in model fit was not significant for the restricted model. As a result, the comparison restrictive measurement model was used to estimate the structural model. Scalar invariance that involved constraining the factor loadings and intercepts of both groups as equal was also performed. The model fit indices was significantly worse necessitating the use of the restrictive model in estimating the structural model.

The constrained measurement model was used as part of the structural baseline to determine whether males and females differed on the hypothesised relationships among the latent constructs. Structural invariance was tested for by comparing a more restrictive model (using the restrictive measurement model) to a less restrictive model. The baseline structural

model that was used in the current study assumes equivalence between males and females, and the less restrictive comparative model assumes differences on particular paths of the hypothesised model. In the restricted structural model, paths were constrained to be equal between groups but not within groups. In the less restrictive model, the parameter estimates showing the relationships across the latent constructs were freely estimated. The Satorra and Bentler (1994) correction test was again used to determine if the change in chi-square between the two structural models was significant. Given that the correction test was insignificant at $p > .05$, the less restrictive model was adopted. The less restrictive model was ran again in Mplus using maximum likelihood and bootstrapping to provide a more representative parameter estimate of the hypothesised model.

3.5.2. Qualitative data

The process of qualitative data analysis usually commences while the researcher is in the field given that he or she makes major decisions regarding what qualifies as good data. The process of thematic data analysis, as described by Creswell (2007), moves in a spiral direction with each stage of analysis effecting changes on the other stages. In addition, after the collection of volumes of data it must be properly organised before any actual analysis can begin. Accordingly, data management, which is one of the important stages in analysis, was done by transcribing qualitative interviews and organising this data into folders and storing on a computer. These files were later transferred to ATLAS-ti, a statistical tool for analysing qualitative data (Friese, 2011; Muhr, 1991). The process of analysis used in the current dissertation was modelled after the steps of analysis in Creswell (2007).

The first step in any qualitative data analysis is the task of reading through the data several times until the researcher is quite familiar with all of its content (Creswell, 2007, 2009). Given that qualitative data presents voluminous amounts of information, it was necessary for the author to allocate enough time to read the text several times in order to have

a good knowledge of its content. During this process, the author observed patterns that were emerging from the data. Kvale and Brinkmann (2009) noted that the craftsmanship of the researcher, his or her knowledge of the research topic and mastery of the tools for analysis, was necessary for quality data analysis to be conducted. During the process of endeavouring to obtain an overview of the data, the author consistently revisited the research questions in order to identify data that pertained to them. The emerging patterns were managed with the use of memos during the data analysis process. After reading the text several times and observing the emerging patterns, codes were assigned to segments of the text that yielded important information pertaining to the study's research questions. Kvale and Brinkmann (2009) refer to this process as meaning coding. During this stage, data was separated into segments and codes were assigned for later identification. The codes that were created in this study were both data-driven and concept-driven as either of the two can be applied (Kvale & Brinkmann, 2009). Data-driven codes are codes that emerge from the contents of the interviews, while concept-driven codes are determined in advance by the researcher through information derived in existing literature (Kvale & Brinkmann, 2009). It was important to use both methods of coding because some of the information that emerged was directly related to some of the concepts in the literature, while others were somewhat novel.

The next stage of data analysis involved reducing the emerging codes to categories that could be adequately managed. A total of 44 codes emerged during the initial coding stage and these had to be re-categorised by either creating a new code or subsuming some codes under previously created codes. Examples of codes include agency thinking, alternative goals, expansion of the family, limited resources and sources of life satisfaction. Creswell (2007) describes that the process of re-categorising codes is necessary since the researcher tends to commence with a large number of codes. It is salient to reiterate that the process of analysis is spiral and as a result there was a continuing process of reading, coding and

recoding all through the process of analysis. After the development of categories, further analyses of the data were conducted by assigning themes. These themes represented overarching frameworks from which several aspects of the data could be subsumed. Additionally, these themes were also derived from condensing previous codes into thematic areas that specifically addressed the research questions stated at the onset of the study. A total of five themes were developed and each of these had a number of sub-themes. The ATLAS-ti software was particularly useful during the stages of organisation, coding and recoding of the data.

3.6. Ethical Considerations

Considering ethical issues is necessary before the commencement of any study (American Psychological Association, 2010; Silverman, 2005). In the current study, ethics clearance was obtained from the research ethics committee (REC) (Humanities) at Stellenbosch University. Additional institutional permission from Ghana Educational Service (GES), Northern region, and from the seven schools that participated in the study was also obtained. As applicable to any scientific study, the ethical requirements of informed consent were met. Participants were provided with detailed information about the research before consent was obtained. Assent forms were provided for participants below the ages of 18, while consent forms were given to their parents and legal guardians, and participation in the study was contingent upon return of the consent forms and assent forms.

Attempts were also made to ensure that participants did not feel pressured to participate in the study as a result of the possible asymmetrical power relation between the interviewer and the participant (Kvale & Brinkmann, 2009). Furthermore, establishing rapport is a key strategy used in qualitative research to deal with power relations during interviews (Green & Thorogood, 2009). Interviews commenced with informal discussions on the author's personal background in order to create an atmosphere, which would encourage

optimal response from participants. Participants were also assured that their responses were confidential and they were under no obligation to answer in any specific manner. Teachers were also excluded from the qualitative phase in order to ensure that participants would not alter their responses during the interviews due to their presence.

Anonymity and confidentiality were important ethical standards that the author had to uphold (Picardi & Masick, 2014; Punch, 2005). Identifiable characteristics, including participants' names, were excluded from the demographic data that were gathered. Personal identifiers such as grade, pseudonyms, age, and sex was used to describe the sample of the study. The author ensured that both qualitative and quantitative data could not be traced back to participants. Confidentiality was ensured by keeping the data within a restricted access in a way that only the author and authorised individuals could access it. There was no foreseeable ethical dilemma relating to the standards of confidentiality and anonymity.

Kvale and Brinkmann (2009) indicated that researchers must reflect on the potential benefits or harm that their study would bring to the participants. Although the current study did not bring any direct or immediate benefits to participants, it provided an opportunity for them to reflect on their experiences. Moreover, the information provided in both the quantitative and qualitative phases of the study could be used to promote interventions that would enhance mental health in this region. Participants were not exposed to any risk as a result of partaking in this study, apart from the inconvenience associated with leaving the classroom and taking time to participate in the research. Participants who partook in the qualitative phase were provided with snacks as a result of the extra time spent to partake in the personal interviews. Pencils and erasers were also distributed at the end of each data collection session. Apart from issues of consent, confidentiality and potential benefits of the study, researchers are also responsible for making available their research findings to participants (Green & Thorogood, 2009; Kvale & Brinkmann, 2009; Neuman, 2011). The

author hopes to provide a summary report of her findings and make this available to the schools and the Ghana Educational Service of the Northern region of Ghana.

An important ethical consideration that Kvale and Brinkmann (2009) describe, quite extensively, is the role of the researcher during the research process. According to these authors, it is the duty of the researcher to ensure that all ethical standards are met as well as engaging with the participants in a manner that will elicit information useful to answering the study's research questions. Researchers are also required to make their research findings available to the public. In order to achieve this, the author intends to publish at least three manuscripts from the current dissertation.

3.7. Reflexivity

Researchers are encouraged to engage in reflexivity throughout the process of collecting data, analysing and reporting (Moustakas, 1994). Reflexivity refers to a consciousness of the position of the researcher as relevant to the process and outcome of the research (Green & Thorogood, 2009; Steedman, 1991) and the fact that researchers are part of the world they study (Punch, 2005). With this in mind, I endeavoured to reflect on my own biases and personal background in order to ensure that meanings and experiences, which were communicated by the participants, were captured and presented adequately. It was also important to reflect on how my position as a researcher influenced the process of collecting data. Some of these reflections are highlighted below.

Firstly, as a Ghanaian citizen myself, and possibly being regarded as an insider in the communities in which I conducted my research, I found the entry into the community of schools for research to be relatively unhindered in some schools, since the heads of these schools appreciated the fact that a female would pursue higher education to a doctoral level.

Secondly, both male and female participants seemed astonished about what they deemed was my academic achievement (seeing a young, female compatriot of theirs with the

academic qualifications, and studying even beyond the master's degree), and not the interview process, posing some challenges in trying to get them to focus on the interviews. The astonishment and curiosity about my educational background was unsurprising, given the context of research where educational opportunities for females were limited. A few male participants seemed hesitant to open up during the interview sessions probably because of gender relations. I also realised that my position as a researcher from a foreign university spurred a lot of curiosity from the participants. They wanted to understand how I was able to secure such a prestigious opportunity and for some this was a source of motivation. Unfortunately, this position also stirred some expectations such as financial assistance, which I was unable to provide for practical and ethical reasons.

Thirdly, reflecting on my position as a female researcher in a context where very few females have had the opportunity to get education was important. It was necessary to empathise with other females who, due to no fault of their own might never have the opportunity to enjoy the full benefits of formal education. These girls provided an interpretation of hope that could not be understood by reading the literature or consulting statistics. They also presented other views of life satisfaction that was centred on their unique experience of having the opportunity to enjoy some formal education. As a female researcher, I could easily relate with their experiences, giving me an opportunity to adequately present their unique perspectives. However, it was important to ensure that my personal experiences did not change the narratives provided by the participants.

Fourthly, it was also important to find a justification for studying the positive aspects of mental health in a context where the most pressing issues were socio-economic in nature. Apart from the apparent need to generate new evidence, it was important to understand whether positive mental health could be studied in a context of economic deprivation. The questions of hope, perceived social support and life satisfaction were necessary in a context

where it would be assumed that these experiences might be almost non-existent.

Understanding what provided hope for adolescents who could barely afford to pay for their education or daily subsistence, was not only informative but ethically responsible. My research provided a voice to these adolescents in a manner that would not otherwise be presented by the current research trends within the Northern region of Ghana.

Moreover, it was crucial to reflect on how issues such as hope and life satisfaction, which could be regarded as middle-class concerns were received in a scarce-resource context. In doing so, participants' responses reflected already existing predominant patterns in the literature, and these constructs did not seem alien to them. Additionally, their responses reflected the applicability of these constructs in scarce-resource context such as the Northern region of Ghana, when trying to understand well-being in social, economic, physical and psychological domains. For instance, life satisfaction was associated with academic prowess and the presence of adequate material sustenance.

3.8. Credibility, Trustworthiness and Transferability

Apart from the standards for validation and reliability already outlined for the quantitative measures, there is also a need to ensure that qualitative findings also meet certain criteria, albeit, different from the standards for quantitative research. To ensure the credibility of the qualitative findings, there was a prolonged engagement in the field, for approximately 5 months. Evidence from the field was corroborated with theoretical perspectives in the literature. The promotor of this project acted as a peer reviewer who asked critical questions to ensure the credibility of the data presented. Moreover, the presentation of the results was also accompanied by direct quotes, which represented thick descriptions providing evidence for claims made and themes that were created (Creswell, 2009).

Furthermore, a process of member-checking and response validation (Creswell, 2007, 2009) was carried out during the interview sessions. The author occasionally confirmed with

participants if she had adequately captured the information they intended to communicate. In addition, the author cross-checked with participants evidence that did not concur with well-established theoretical frameworks and reported on such as recommended by Miles and Huberman (1994). For example, some participants had a rather negative view of their support networks and these were thoroughly examined and reported as negative aspects of social relations.

Trustworthiness of the data was ensured by preparing field notes during observations and interview sessions, creating memos and using a quality tape recorder (Creswell, 2009). The field notes assisted with establishing a good context and background to understanding the responses that participants provided during the interview sessions.

Pertaining to the quantitative data, statistical generalisations to adolescents in the Northern region of Ghana would be possible as result of the random selection of a large number of adolescents to participate in the study. Qualitative research on the other hand, regards generalisation as an alien term and rather emphasises transferability of findings. Nevertheless, Green and Thorogood (2009) emphasise what they refer to as conceptual generalisability. This term suggests that qualitative researchers are not interested in generalising to other populations (statistical generalisation) but seek to generate concepts that can be used to explain human behaviour in different contexts with some similarities. Likewise, the themes that emerged could be used to explain similar representations of hope, perceived social support and life satisfaction in different contexts. Kvale and Brinkmann (2009) also suggest the need for analytical generalisability, which allows a researcher to make rational judgements about how well a study's findings might describe probable occurrences of a phenomenon in a similar but different situation. As stated already, the findings from the qualitative phase could explain how other adolescents might conceptualise their experience of these phenomena.

In summary, in order to achieve the aims of the study, a mixed method of research was employed. This method allowed the researcher to gather quantitative data on the relationship between the variables, as well as qualitative data on how the constructs under study were conceptualised by school-going adolescents in the Northern region of Ghana. A combination of random and purposively sampling techniques across seven schools was used to select participants for the study. Furthermore, quantitative data was analysed using SEM, while qualitative data was analysed using the thematic method of analysis. Results of both quantitative and qualitative data are presented in the next chapter.

Chapter 4: Results

The current study sought to determine the relationships between hope, perceived social support, life satisfaction (independent constructs) and mental health (dependent construct). Structural equation modelling (SEM) was used to test how well the hypothesised model fit the observed data. The thematic method of analyses was also used to analyse qualitative data, which provided a better understanding of the relationships observed in the hypothesised model. This chapter comprises a presentation of both quantitative and qualitative findings. Model fit indices and parameter estimates for the hypothesised direct and indirect relationships are outlined. The results of the qualitative data analysis are also presented as themes that addressed the qualitative research questions.

4.1. Quantitative Results

4.1.1. Descriptive statistics

The total scores for each of the latent variables were computed by summing up the items that were retained after the preliminary analyses. The total score for hope ranged from 26.00 to 90.00 ($M = 69.95$ and $SD = 9.82$). Total score for life satisfaction ranged from 36.00 to 71.00 ($M = 54.57$, $SD = 6.64$). Total scores for perceived social support ranged from 13.00 to 84.00 ($M = 62.09$, $SD = 11.90$). The descriptive statistics for psychological well-being included a range of 16.00 to 65.00 ($M = 40.63$, $SD = 7.88$). Total scores for psychological distress ranged from 15.00 to 72.00 ($M = 39.61$, $SD = 9.30$). It must be noted, however, that due to the dropping of items the minimum score was calculated as $1 \times$ number of items retained, while the maximum score was calculated as the highest score on the scale \times number of items retained. This influenced the means that emerged so that they are not directly comparable to arithmetic means in other studies that included all the items in calculating composite scores.

The Pearson correlation coefficient was used to investigate the relationships among all the item parcels of the latent constructs of hope, life satisfaction, perceived social support and mental health. It is worth reiterating that the variable of mental health has been divided into two global scales: psychological well-being (general positive affect, emotional ties and life satisfaction) and psychological distress (anxiety, depression and loss of behavioural and emotional control). The results of these analyses are presented in Table 4.1. As seen in Table 4.1, there were significant positive correlations between the subscales measuring perceived social support, life satisfaction and the subscales of psychological well-being, indicating preliminary support for the hypotheses testing the structural relationships among these constructs. The subscales of hope were significantly related to only general positive affect, one of the subscales measuring psychological well-being.

The relationships that were not significant included two of the subscales for measuring psychological distress (anxiety and depression) and the subscales of hope, perceived social support and life satisfaction. However, there was a significant correlation between anxiety and depression. Furthermore, the aforementioned constructs of psychological distress were significantly correlated with loss of behavioural and emotional control. Interestingly, loss of behavioural and emotional control was significantly negatively correlated with the friends subscale measuring perceived social support, general positive affect as an indicator of psychological well-being and all the subscales of life satisfaction. With the variable of hope, loss of behavioural and emotional control was significantly negatively related to only the subscales of trust and confidence and social relations and personal value. Additionally, the relationships between loss of behavioural and emotional control and emotional ties and between loss of behavioural and emotional control and life satisfaction (as indicators of psychological well-being) were not significant. In line with the literature, it was expected that all the subscales would be significantly correlated, but this was

not fully confirmed. However, the significant associations between the positive indicators across all subscales and the significant associations among the negative indicators as well as between some positive and negative indicators (see Table 4.1 for the illustration of the summary of means, standard deviation and correlations) fulfilled the statistical requirement for carrying out SEM

4.1.2. Measurement model

As already described, two measurement models were tested using confirmatory factor analysis (CFA) and the method of robust maximum likelihood (MLR). The second hypothesised measurement model had a significant improvement in fit after dropping the subscales of lack of perspective (for the latent construct of hope) and school (for the latent construct of life satisfaction). The first measurement model, which included lack of perspective and school had the following comparative fit indices: $\chi^2(125) = 298.00$, $p < .001$, $\chi^2/df = 2.38$; Comparative Fit Index (CFI) = .913; Root Mean Square Error of Approximation (RMSEA) = .044 [90% CI: .038, .050]; Standardised Root Mean Square Residual (SRMR) = .044. Although there was a significant chi-square, Kline (2005) recommended that the chi-square should be interpreted based on its ratio to the degrees of freedom. A relative chi-square of <3 was described as an acceptable model fit (the *relative chi-square* being the division of chi-square by the degrees of freedom). RMSEA and SRMR were all less than .05 indicating a good fit for the measurement model. The criteria for an acceptable model fit for these goodness-of-fit indices were defined by $CFI \geq .90$, $RMSEA < .08$, and $SRMR < .08$ (Hu & Bentler, 1999). Given that the other fit indices showed an acceptable fit the first model could be said to have an acceptable fit.

Table 4.1.

Means, Standard Deviation and Correlation Matrix for all Indicators

	Means	SD	HOPE1	HOPE2	HOPE3	LSS1	LSS2	LSS3	LSS4	PSS1	PSS2	PSS3	PWB1	PWB2	PWB3	PD1	PD2	PD3	
HOPE1	4.83	.82	1																
HOPE2	5.06	.89	.56***	1															
HOPE3	4.72	1.02	.49***	.43***	1														
LSS1	2.75	.61	.17***	.14***	.19***	1													
LSS2	2.81	.65	.18***	.16***	.23***	.28***	1												
LSS3	3.3	.73	.19***	.14***	.17***	.22***	.27***	1											
LSS4	3.18	.82	.09*	.09*	.10*	.25***	.13**	.16***	1										
PSS1	5.5	1.26	.23***	.19***	.24***	.21***	.26***	.17***	.15***	1									
PSS2	5.06	1.41	.31***	.20***	.31***	.19***	.26***	.20***	.08*	.50***	1								
PSS3	4.88	1.17	.21***	.16***	.20***	.35***	.08*	.12**	.19***	.37***	.35***	1							
PWB1	3.72	.76	.22***	.13**	.17***	.22***	.23***	.17***	.15***	.26***	.24***	.13***	1						
PWB2	3.47	1.29	.06	.06	.07	.13**	.19***	.13**	.09*	.19***	.17***	.12**	.41***	1					
PWB3	3.811	1.22	.05	.06	.03	.12**	.15***	.11**	.10**	.17***	.15***	.13**	.24***	.20***	1				
PD1	3.17	.8	-.03	-.03	-.02	-.01	-.02	-.03	-.08	-.04	.00	-.05	.04	.03	-.04	1			
PD2	3.06	.95	-.06	-.01	-.06	-.05	-.07	0	-.14***	-.08*	-.04	-.10**	.03	.07	-.09*	.48***	1		
PD3	2.9	.96	-.13**	-.06	-.09*	-.13***	-.14***	-.08*	-.13**	-.17	-.16	-.11**	-.18***	-.05	-.08*	.45***	.44***	1	

Note: HOPE1 = Trust and confidence subscale for hope, HOPE2 = Positive future orientation for hope, HOPE3 = Social relations and personal value subscale for hope, LSS1 = Friends subscale for life satisfaction, LSS2 = family subscale for life satisfaction, LSS3 = Self subscale for life satisfaction, LSS4 = Living environment subscale for life satisfaction, PSS1 = Family subscale for perceived social support, PSS2 = Significant others subscale for perceived social support, PSS3 = friends subscale for perceived social support, PWB1 = General positive affect for psychological well-being, PWB2 = Emotional ties subscale for psychological well-being, PWB3 = life satisfaction subscale for psychological well-being, PD1 = Anxiety subscale for psychological distress, PD2 = Depression subscale for psychological distress, PD3 = Loss of behavioural control subscale for psychological distress.

* $p < .05$, ** $p < .01$, *** $p < .001$

It must be reiterated that lack of perspective and school subscales loaded poorly on the factor structure that emerged after the first CFA. As a result another CFA was performed, excluding these two subscales. The fit indices, which are of the second measurement model, are as follows: $\chi^2(94) = 218.15, p < .001, \chi^2/df = 2.32$; CFI = .935; RMSEA = .043 [90% CI: .035, .050]; SRMR = .041. The Satorra and Bentler (1994) corrected chi-square difference was used to determine whether the dropping those subscales would produce a significant improvement in model fit. The value for the correction index was 78.59, $p < .001$.

This implied that excluding lack of perspective and school subscales provided a better model fit – thus rendering the remaining subscales as better indicators of their respective underlying latent variables (hope and life satisfaction). Table 4.2 outlines the factor loadings for the second measurement model.

Table 4.2

Factor Loadings for the Measurement Model Excluding Lack of Perspective and School

Indicators	Unstandardized estimates	Standardised estimates
HOPE1	1	.79
HOPE2	.93	.68
HOPE3	.99	.64
LSS1	1	.54
LSS2	1.07	.54
LSS3	1.00	.45
LSS4	.88	.35
PSS1	1	.70
PSS2	1.12	.70
PSS3	.69	.52
PWB1	1	.72
PWB2	1.30	.55
PWB3	.80	.36
PD1	1	.68
PD2	1.21	.69
PD3	1.17	.66

Note: HOPE1 = Trust and confidence subscale for hope, HOPE2 = Positive future orientation for hope, HOPE3 = Social relations and personal value subscale for hope, LSS1 = Friends subscale for life satisfaction, LSS2 = family subscale for life satisfaction, LSS3 = Self subscale for life satisfaction, LSS4 = Living environment subscale for life satisfaction, PSS1 = Family subscale for perceived social support, PSS2 = Significant others subscale for perceived social support, PSS3 = friends subscale for perceived social support, PWB1 = General

positive affect for psychological well-being, PWB2 = Emotional ties subscale for psychological well-being, PWB3 = life satisfaction subscale for psychological well-being, PD1 = Anxiety subscale for psychological distress, PD2 = Depression subscale for psychological distress, PD3 = Loss of behavioural control subscale for psychological distress.

The measurement model (Table 4.2), with factor loadings being significant at $p < .001$, showed strong factor loadings for each indicator on their respective latent variables.

4.1.3. Structural model

A structural model showing the hypothesised relationships between the latent constructs of hope, perceived social support, life satisfaction, psychological well-being and psychological distress was tested. The hypothesised model had a good fit shown by the following fit indices: $\chi^2(94) = 227.31, p < .001, \chi^2/df = 2.42$; CFI = .936; RMSEA = .044 [90% CI: .037, .052]; SRMR = .041. As a result of the chi-square's sensitivity to sample size, it was found to be significant. However, based on Kline's (2005) recommendation on the use of a relative chi-square (that is its ratio to the degrees of freedom) this model could be said to still have an acceptable fit. Moreover, RMSEA and SRMR were all lower than .05. Despite the CFI being less than .95, it was also greater than .90 and, according to Hu and Bentler (1995), represents an adequate model fit.

The percentage of variance explained by the hypothesised model was 24%, 41%, 35% and 5% for hope, life satisfaction, psychological well-being and psychological distress, respectively. The percentage of variance explained by the model was the least for psychological distress, while life satisfaction had 41% of its variance explained by the model. This implies that the hypothesised model was most adequate in explaining life satisfaction compared to the other variables in the model.

In SEM it is important to report model fit indices alongside significant paths coefficients and parameter estimates (see Figure 4.1). In the present study, a number of direct relationships among the latent constructs (hope, perceived social support, life satisfaction, psychological well-being and psychological distress) were hypothesised. It was hypothesised

that there would be a significant positive relationship between hope and psychological well-being, hope and life satisfaction as well as between life satisfaction and psychological well-being. Contrary to the hypothesised relationship, the relationship between hope and psychological well-being was not significant. However, hope was found to have a significant positive relationship with life satisfaction ($b = .10$, [95% CI: .03, .17], $p < .01$). This finding implied that increased levels of hope were predictive of increased life satisfaction. There was also a significant positive relationship between life satisfaction and psychological well-being ($b = .75$, [95% CI: .37, 1.14], $p < .001$). It was hypothesised that perceived social support would have a significant positive relationship with psychological well-being. This hypothesis was confirmed ($b = .13$, [95% CI: .02, .25], $p < .05$). This finding implied that increased levels of perceived social support resulted in increased levels of psychological well-being. Additionally, the hypothesised relationship between perceived social support and life satisfaction was significant ($b = .19$, [95% CI: .11, .27], $p < .001$), as well as the relationship between perceived social support and hope ($b = .36$, [95% CI: .26, .46], $p < .001$). These findings implied that increased levels of perceived social support resulted in increased levels of life satisfaction and hope.

The present study also sought to investigate the direct negative relationships between hope and psychological distress, perceived social support and psychological distress, and life satisfaction and psychological distress. None of the hypothesised direct negative relationships between psychological distress and hope, psychological distress and perceived social support, and psychological distress and life satisfaction were confirmed. It was found that psychological distress was not significantly negatively related to either hope, perceived social support or life satisfaction. Also noteworthy was the lack of a statistically significant relationship between psychological well-being and psychological distress, disconfirming the study's hypothesis. These findings implied that increase in positive indicators including

levels of hope, perceived social support, life satisfaction and psychological well-being did not result in a reduction in levels of psychological distress.

A number of indirect relationships were hypothesised among the latent constructs of hope, perceived social support, life satisfaction, psychological well-being and psychological distress. Firstly, hope was hypothesised to be indirectly positively related to psychological well-being mediated by life satisfaction. This hypothesis was confirmed. Hope was found to be a strong predictor of psychological well-being with life satisfaction mediating this relationship ($b = .08$, [95% CI: .01, .14], $p < .05$). Given that hope was found to have a statistically non-significant direct effect on the psychological well-being of adolescents, the relationship between these constructs mediated by life satisfaction demonstrates a fully mediated model. A fully mediated relationship between hope and psychological well-being slightly contradicted the study's hypothesis, which was a partially mediated relationship. The significant indirect relationship between hope and psychological well-being indicated that adolescents' experience of hope was necessary for psychological well-being, only when they also felt satisfied with their lives.

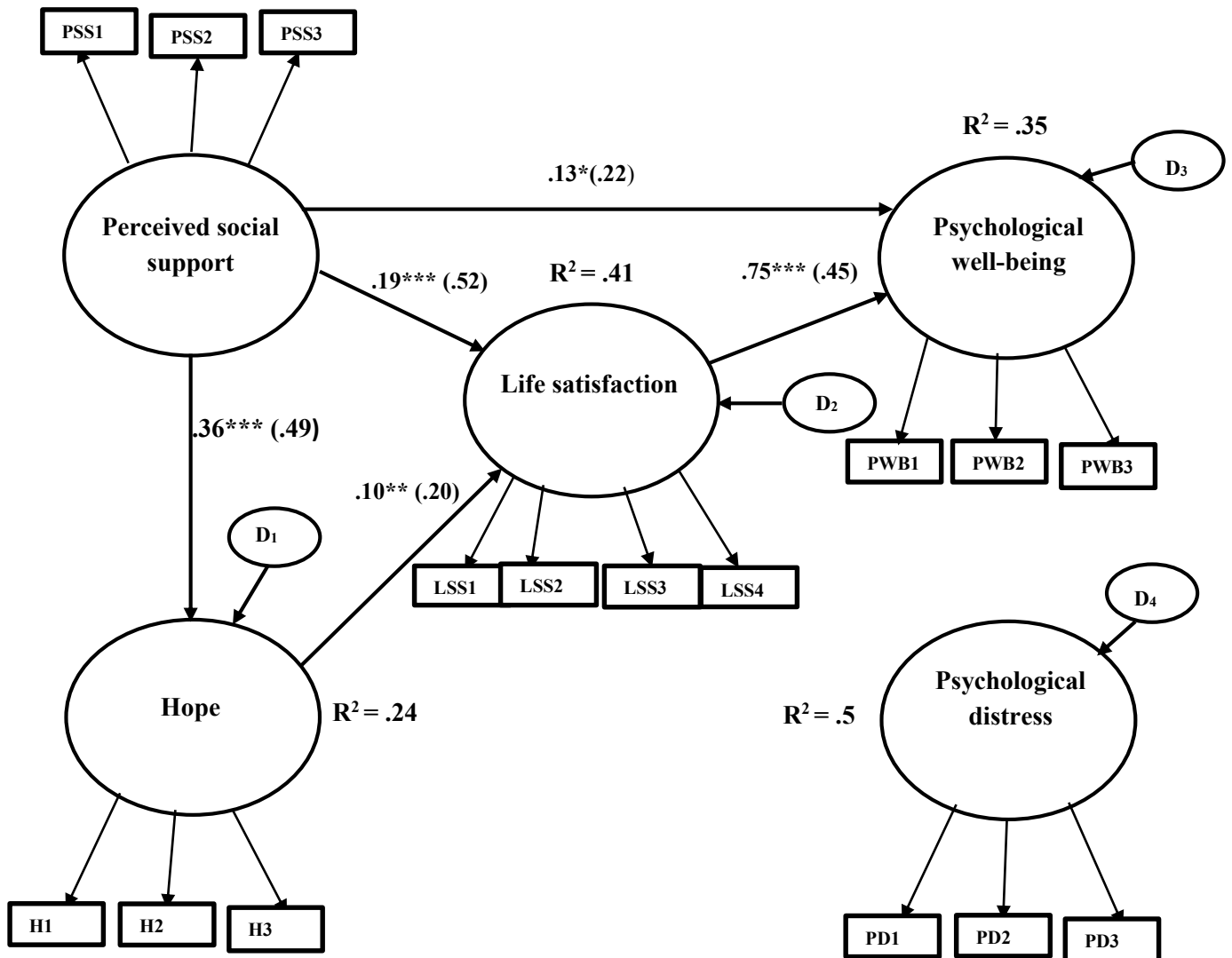
Secondly, hope was hypothesised to be inversely related to psychological distress when mediated by life satisfaction, however, this hypothesis was not confirmed. The findings of the present study showed that the pathway from hope to psychological distress through life satisfaction was not significant. This implies that life satisfaction did not significantly mediate the negative relationship between the experience of hope and psychological distress in this sample of Ghanaian school-going adolescents.

Thirdly, an indirect positive relationship between perceived social support and psychological well-being mediated by either life satisfaction or hope was hypothesised. The result of the analyses showed that there was a significant total sum of indirect effects of perceived social support on psychological well-being ($b = .14$, [95% CI: .04, .23], $p < .01$).

Life satisfaction was a stronger mediator of the relationship between perceived social support and psychological well-being ($b = .14$, [95% CI: .06, .23], $p < .01$) compared to hope, which had a statistically non-significant mediating effect. The significant mediated relationship between perceived social support and psychological well-being via life satisfaction confirms the study's hypothesis, while the lack of a mediated relationship via hope disconfirms the study's hypothesis. The significant mediated relationship between perceived social support and psychological well-being, considered in light of the already highlighted direct relationship, showed that life satisfaction partially mediated this relationship. Thus, the hypothesised partially mediated relationship was confirmed. The significant indirect relationship between perceived social support and psychological well-being indicated that adolescents' perception of the availability of social support was necessary for the experience of well-being, when they also felt satisfied with the current events in their lives. It is of interest to note that the mediated relationship had a stronger beta coefficient compared to the direct path from perceived social support to psychological well-being. This implied that the impact of support on psychological well-being was greater when adolescents evaluated their lives as satisfactory.

Fourthly, perceived social support was hypothesised to be indirectly related to life satisfaction, with hope having mediating effects. This hypothesis was confirmed. It was found that perceived social support emerged as a significant positive predictor of life satisfaction, when this relationship was mediated by hope ($b = .04$, [95% CI: .01, .06], $p < .01$). The significant indirect relationship between perceived social support and life satisfaction indicated that adolescents' perception of the availability of social support was necessary for the experience of life satisfaction, when they also felt hopeful about their future. Given that perceived social support was also directly related to life satisfaction, this

would suggest that hope is a partial mediator of the indirect relationship between these constructs.



* $p < .05$, ** $p < .01$, *** $p < .001$, Standardised estimates in parenthesis

Figure 4.1. Structural model of the effect of perceived social support and hope on mental health, showing partial mediation via life satisfaction.

Fifthly, it was also hypothesised that perceived social support would be negatively related to psychological distress, with either hope or life satisfaction mediating this relationship. This hypothesis was not confirmed. Data showed that none of these mediated pathways from perceived social support to psychological distress were significant. This

suggests that adolescents' perceptions of social support, when mediated by either life satisfaction or hope, did not have any impact on their experience of psychological distress. Figure 4.1 is a presentation of the structural model with significant parameter estimates and their respective indicators. An overview of the model reveals that none of the other latent constructs were either directly or indirectly related to psychological distress. In addition, apart from the significant direct structural paths among the variables, partially mediated relationships between perceived social support and psychological well-being via life satisfaction, and between perceived social support and life satisfaction via hope, were also found. However, a fully mediated path was found in the relationship between hope and psychological well-being via life satisfaction.

A secondary aim of the quantitative aspect of this study was to present a gender comparison of the structural paths of the hypothesised model. Measurement invariance was assumed since the constrained comparison model had a non-significant corrected chi-square difference value. The model fit indices for the less restrictive baseline measurement model are presented as follows: $\chi^2(188) = 317.25, p < .001, \chi^2/df = 1.69$; CFI = .932; RMSEA = .044 [90% CI: .035, .052]; SRMR = .048. The constrained comparison measurement model also had an adequate fit with the following model fit indices: $\chi^2(199) = 328.82, p < .001, \chi^2/df = 1.65$; CFI = .932; RMSEA = .043 [90% CI: .034, .051]; SRMR = .052. The results of the study showed that the constrained measurement model had a slightly worse fit. However, the non-significance of the corrected chi-square difference value necessitated that the constrained measurement model be used in estimating the structural model.

The baseline constrained structural model yielded the following model fit indices: $\chi^2(209) = 336.93, p < .001, \chi^2/df = 1.61$; CFI = .933; RMSEA = .041 [90% CI: .033, .049]; SRMR = .056. These fit indices demonstrated a good fit. A less restrictive model with the following fit indices: $\chi^2(199) = 339.82, p < .001, \chi^2/df = 1.71$; CFI = .931; RMSEA = .044

[90% CI: .036, .052]; SRMR = .052, was compared to the constrained model using the Satorra and Bentler (1994) correction test. It was found that the corrected chi-square difference value was not significant. Consequently, the less restrictive model was retained since it best reflected the group differences in the structural paths of the hypothesised model.

Among males, the hypothesised model accounted for 39%, 40%, 32% and 6% of the variance in hope, life satisfaction, psychological well-being and psychological distress, respectively. Among females, the hypothesised model explained 11%, 43%, 43% and 4% of the variance in hope, life satisfaction, psychological well-being and psychological distress, respectively. The results showed that the variance explained among males was almost equivalent across the latent constructs of hope, life satisfaction and psychological well-being, thus implying that the model explained equivalent amounts of variance for each of these constructs. In contrast, the variance explained by the hypothesised model among females was greater in life satisfaction and psychological well-being, when compared to the other latent constructs (that is, hope and psychological distress). Among both males and females, psychological distress had the least variance explained.

In addition to presenting the model fit indices, it was important to also present the parameter estimates for each of the hypothesised paths for males and females. These results included both the hypothesised direct and indirect relationships. For the direct relationships, it was hypothesised that there would be significant direct relationships among the variables of hope, perceived social support, life satisfaction, psychological well-being and psychological distress. This implies that each of the structural paths connecting one latent variable to the other would be significant.

For males⁷ (as shown in Figure 4.2), the results illustrated that there was non-significant positive relationship between hope and psychological well-being males. There was also a non-significant positive relationship between perceived social support and psychological well-being, disconfirming the study's hypothesis. However, the parameter estimate for the pathway connecting life satisfaction and psychological well-being was significant ($b = .73$, [95% CI: .22, 1.24], $p < .01$). There were no significant negative relationships between psychological distress and perceived social support, psychological distress and life satisfaction, as well as between psychological distress and hope for males. The hypothesised negative relationship between psychological distress and life satisfaction for males was approaching significance at a p value of .08. Additionally, the relationship between hope and life satisfaction for males, although not significant, was approaching significance at a p value of .09. Significant positive relationships among males were found between perceived social support and life satisfaction ($b = .19$, [95% CI: .08, .30], $p < .01$), and between perceived social support and hope ($b = .43$, [95% CI: .29, .56], $p < .001$).

For female participants (as shown in Figure 4.2), similar significant paths emerged, with minor differences, when compared to males. Parameter estimates for females showed that the direct positive relationships between the latent variables (hope, perceived social support and life satisfaction) and psychological well-being were not significant. However, the parameter estimate for life satisfaction and psychological well-being was approaching significance ($p = .08$). In addition, none of the direct paths from hope-, perceived social support- and life satisfaction to psychological distress were significant. Furthermore, the results showed that there was a significant positive relationship between hope and life

⁷ Statistical results for males are non-italicised, while those of females are presented in bold and italicised formats.

satisfaction ($b = .10$, [95% CI: .02, .18] $p < .05$), and between perceived social support and life satisfaction ($b = .17$, [95% CI: .09, .26], $p < .001$). There was also a significant positive relationship between perceived social support and hope ($b = .27$, [95% CI: .12, .41], $p < .001$). Similar to males, the negative relationship between psychological distress and psychological well-being was not significant. Both Table 4.3 and Figure 4.2 outline a summary of parameter estimates for each of the hypothesised relationships for males and females.

For the indirect relationships, it was hypothesised that hope would be positively related to psychological well-being, and negatively to psychological distress, mediated by life satisfaction. Perceived social support was hypothesised to be positively related to psychological well-being, and negatively to psychological distress, mediated by either hope or life satisfaction. Furthermore, perceived social support was hypothesised to be indirectly positively related to life satisfaction, when mediated by hope.

For both males and females, the relationship between hope and psychological well-being, mediated by life satisfaction was found to be statistically non-significant. This finding is noteworthy because before gender was incorporated into the model there was a significant relationship between hope and psychological well-being via life satisfaction. Similarly, the negative relationship between hope and psychological distress mediated by life satisfaction, was not significant for both groups.

Table 4.3

Summary of Regression Coefficients for Males and females

Hypothesised relationship	Males	Females
Perceived social support and psychological well-being	(b = .11, [95% CI: -.08, .31], p > .05)	(b = .13, [95% CI: -.10, .36], p > .05)
Perceived social support and psychological distress	(b = -.08, [95% CI: -.26, .09], p > .05)	(b = -.05, [95% CI: -.23, .13], p > .05)
Hope and psychological well-being	(b = .00, [95% CI: -.22, .22], p > .05)	(b = -.09, [95% CI: -.26, .07], p > .05)
Hope and psychological distress	(b = .11, [95% CI: -.12, .35], p > .05)	(b = .08, [95% CI: -.22, .07], p > .05)
Life satisfaction and psychological well-being	(b = .73, [95% CI: .22, 1.24], p < .01)	(b = .90, [95% CI: -.12, 1.92], p > .05)
Life satisfaction and psychological distress	(b = -.39, [95% CI: -.83, .05], p > .05)	(b = .02, [95% CI: -.81, .77], p > .05)
Perceived social support and life satisfaction	(b = .19, [95% CI: .08, .30], p < .01)	(b = .17, [95% CI: .09, .26], p < .001)
Hope and life satisfaction	(b = .12, [95% CI: -.02, .25], p > .05)	(b = .10, [95% CI: .02, .18], p < .05)
Perceived social support and hope	(b = .43, [95% CI: .29, .56], p < .001)	(b = .27, [95% CI: .12, .41], p < .001)
Psychological well-being and psychological distress	(b = .01, [95% CI: -.04, .07], p > .05)	(b = .04, [95% CI: -.02, .09], p > .05)

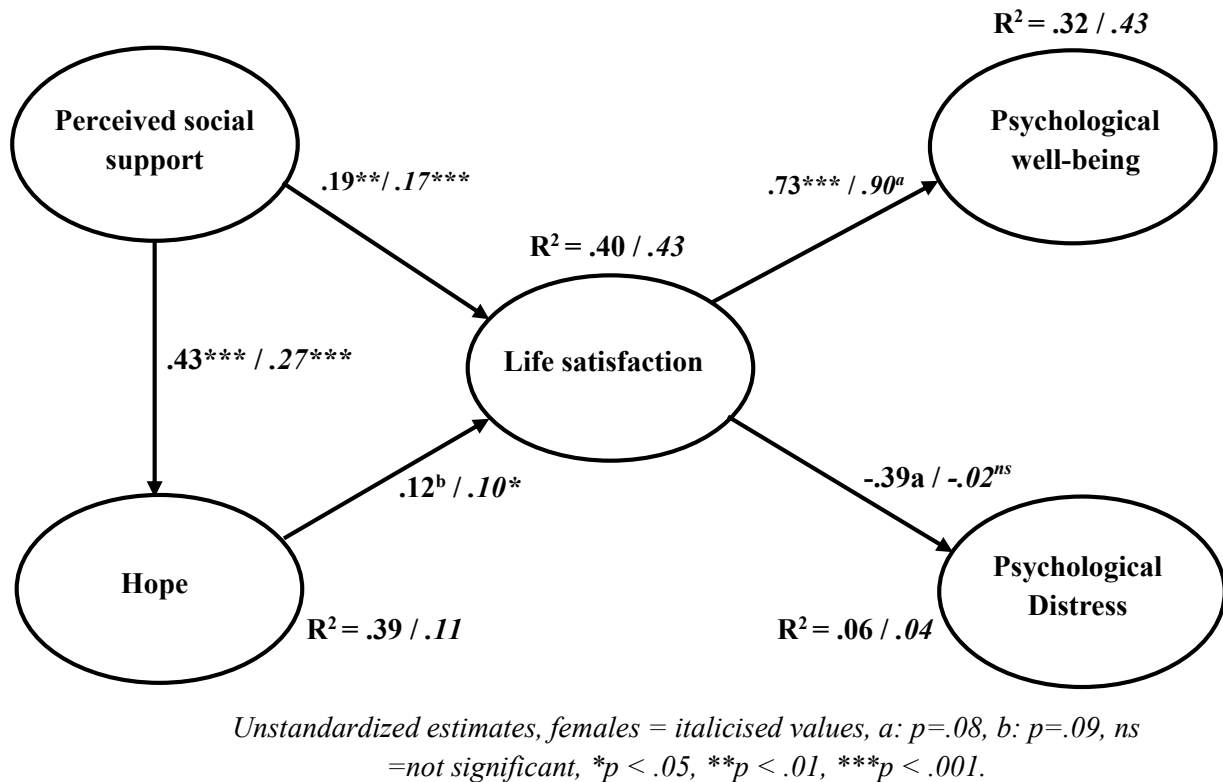


Figure 4.2 Freely estimated structural paths showing gender comparisons

Among males, the sum of indirect effects from perceived social support to psychological well-being was approaching significance ($b = .14$, [95% CI: $-.01, .30$] $p > .05$), at a p value of $.07$. The specific mediated relationship, between perceived social support and psychological well-being via life satisfaction, was found to be significant ($b = .14$, [95% CI: $.02, .26$], $p < .05$) This mediated pathway probably accounted for the greater part of the total indirect effects, given that the alternative mediated relationship through hope was not significant. For females, the hypothesised positive relationship between perceived social support and psychological well-being mediated by life satisfaction was found to be statistically non-significant. Relatedly, the positive relationship between perceived social support and psychological well-being, mediated by hope, was also not significant.

The two mediated paths, showing an inverse relationship, between perceived social support and psychological distress through either life satisfaction or hope were also found to be statistically non-significant for both males and females. Among males, the result of the

analysis showed that perceived social support was not predictive of life satisfaction when this relationship was mediated by hope. Despite the lack of significance, it must be mentioned that, the hypothesised mediated relationship approached significance at a p value of .09. For females, hope was a good mediator of the relationship between perceived social support and life satisfaction ($b = .03$, [95% CI: .00, .05], $p < .05$).

In summary, the hypothesised model comparing males and females showed an adequate fit. However, some of the hypothesised relationships were found to be non-significant for both males and females. These included the direct and indirect relationships between perceived social support, hope, life satisfaction and psychological distress. These findings were replicated in the hypothesised model for the combined group, before the comparison across gender. In addition, some of the significant relationships that were found in the hypothesised model, without the inclusion of gender, such as the relationship between perceived social support and psychological well-being, disappeared when the model was compared across gender. The relationship between hope and psychological well-being, when mediated by life satisfaction, was significant in the combined group but this relationship did not exist when the model was compared across gender. Among males, a new relationship emerged that was not present before gender was incorporated in the model. This finding was the relationship between life satisfaction and psychological distress, which was approaching a significant value.

Males and females were also found to differ, insofar as the positive relationship between life satisfaction and psychological well-being was significant for males but not females. There was also a significant positive relationship between hope and life satisfaction for females but not males. In addition, perceived social support was found to be indirectly related to life satisfaction, with hope mediating this relationship, only among females. Furthermore, the relationship between perceived social support and psychological well-being

when mediated by life satisfaction was found to be significant among males alone.

Implications of these findings are discussed in light of the literature in the next chapter. See

Table 4.4 for a list of model fit indices.

Table 4.4

List of Model Fit indices of Hypothesised Models

Model	χ^2	df	CFI	RMSEA	SRMR
Initial measurement model	298.00	125	.913	.044	.044
Measurement model 2	218.15	94	.935	.043	.041
Structural model	227.31	94	.936	.044	.041
Freely estimated measurement model by gender	317.25	188	.932	.044	.048
Restricted measurement model by gender	328.82	199	.932	.043	.052
Constrained structural model by gender	336.93	209	.933	.041	.056
Freely estimated structural model by gender	339.82	199	.931	.044	.052

Qualitative results on how hope, perceived social support and life satisfaction were conceptualised and engendered among adolescents in the current study is presented in the following sections.

4.2. Qualitative Results

The thematic method of analysis was adopted to analyse the data emerging from the follow-up interviews with selected participants. The emerging themes and sub-themes that were identified as providing explanation for the data gathered are presented below by means of excerpts from the interviews. In order to ensure anonymity, care was taken to protect the identities of those who took part in the interviews by using pseudonyms in presenting the

excerpts from the interviews. The themes that emerged, which are discussed in the sections below, include conceptualising hope, sources of hope, the dynamics of social support, global evaluation and meaning-making about aspects of life, material deprivation and resources for coping and well-being. The themes of “conceptualising hope and sources of hope”, “dynamics of social support” and “global evaluation and meaning-making” emerged from the in-depth exploration of the variables hope, social support and life satisfaction, respectively. A summary of themes and sub-themes is presented in Table. 4.5.

Table 4.5

List of Themes and Sub-themes Emerging from Qualitative Data

THEMES					
Conceptualising hope	Sources of hope	Dynamics of social support	Global evaluation	Material deprivation	Resources for coping
<i>Agency and determination</i>	<i>Social Relations</i>	<i>Familial systems</i>	<i>Sources of life satisfaction</i>		<i>Networking and economic engagement</i>
<i>Experiences of hope</i>	<i>Agency and current achievement</i>	<i>Valued support from friends</i>	<i>Sources of dissatisfaction</i>		<i>External resources</i>
<i>Fear and pathway thinking</i>	<i>Spirituality</i>	<i>Negative facets of social relations</i>			

Note: The sub-theme for each central theme has been italicised.

4.2.1. Conceptualising hope

Adolescents in the current study interpreted hope as a feeling of confidence in their prospective futures. This feeling of confidence was accompanied by a strong sense of optimism as participants related some of their goals for the future. Hopeful thinking for these learners surpassed simplistic wishful thoughts about the future to include a resolute feeling that their aspirations were attainable. Furthermore, the “self” in the context of the individual’s

ability was described as important in hopeful thinking and in the goal-pursuit process. Three sub-themes on the conceptualisation of hope, namely, hope as an expression of agency and determination, experiential accounts of hope and the interaction of fear and hope, emerged from the analysis and are presented below.

4.2.1.1. Agency and determination

As learners described hopeful thinking in relation to the “self”, there was an accompanying sense of determination and confidence in their abilities to realise set-goals. Additionally, learner’s sense of individual agency (personalised sense of purpose) was expressed as a source of motivation as they reflected on their hopes and aspirations for the future. Two learners intimated that:

Hope means having the intention... or the ambition to do something [meaningful such as completing high school]. It has to do with what I intend to do... (Amina, 19-year-old female, Grade 11).

Hope is just to have confidence, it’s just about confidence [in one’s future]. ... I can see that my future is so bright... I am feeling confident because I know that I can also do something, I know I can also do something. (Salim, 20-year-old male, Grade 12).

4.2.1.2. Experiential accounts of hope

Apart from describing what hope meant to them, adolescents were asked whether they had any interesting experiences of hope they would like to discuss. These experiential accounts of hope provided further insight on the meanings and interpretations that these adolescents associated with hope. Some learners recounted how they had aspired to achieve certain goals and the emotional states that accompanied the realisation of those goals. Some of the adolescents’ experiences reflected extreme confidence, what might be referred to as “naïve hope”. These experiences seemed not to be accompanied by pathway-thought

probably because these goals were regarded as relatively accessible and highly probabilistic.

This phenomenon is captured in the excerpts below:

When I was in primary school, and they [teachers] said we should apply for a position, I did not apply because I was having the hope that they will choose me as the prefect, and finally they chose me as the girls prefect (Fuseina, 19-year-old female, Grade 12).

I took part in the private exam and before [writing] some subjects, I hoped that what I learnt [for the private exam] should come, and when I went, I was not disappointed. So I can say that what I hoped for came true. In the aspect of football you know, there have been times that I have played for my team and we hoped to win and we won (Issahaka, 19-year-old male, Grade 12).

However, there were other reports of past experiences of hope, which drew upon the learners' pathway thought and determination to work towards set-goals. It is therefore possible that some learners evaluated the demands of the goals they desired to achieve and decided how much effort was required and what the plausible routes were for achieving those goals.

...since the time I reported to this school, they used to choose some students to be at the bursar's house and I said I need to work hard to be part of them and I was part of them. You will be staying in the bursar's house comfortably compared to the hostel which is crowded and there is a lot of distraction... (Husein, 20-year-old male, Grade 12).

4.2.1.3. Fear and hope

Apart from describing their understanding and past experiences of hope, learners also related other factors that affected their thoughts of the future. Learners noted that at times, the motivation to work towards the future and develop the necessary pathways was infused with some anxiety. These negative emotions of anxiety, which were incited by family members,

seemed to become a salient ingredient in the goal-pursuit process. These family members tended to stir up fear of the future in order to enable learners exert more efforts towards the realisation of a fulfilling future, and in an ironic manner instil a sense of hope in them.

In addition, some participants also seemed to draw a distinction between social relations that inspired fear instead of hope. Family members that instilled fear as a motivating factor were doing so because their benevolence towards the learner was short-lived, especially with regards to the future, and this warranted that learners looked to a hopeful future mixed with some anxiety.

Actually it's only my sister that gives me a sense of hope. My brother frightens me, he tells me that if I am not serious and I do fail he will wash his hands and leave me because after all I am not his child, I am just his brother and he [has] children. He caters for his children and he caters for me... He is the only one responsible for my education so if I don't make it he will actually leave me... I [might end up] taking another direction which can end in something [bad] (Suleman, 20-year-old male, Grade 12).

Furthermore, previous experience of failure in the goal-pursuit process among close family members became a tool for instilling both fear and hope for the future. Adolescents reported that the comparison between family members' current state of frustration and the adolescent's present opportunity for advancement was used to instil a sense of hope. Despite the acknowledgement of negative life situations, learners' reports revealed that their parents recognised the presence of opportunities for adolescents to realise their goals.

... my mother usually advises me that if I don't learn, and I am following those boys, and I fail in future, I will not like it because I can see what is happening to her and she doesn't want it to happen to me. If you are not working and you get married

nowadays it will not always be okay and if you give birth, how will you get support to take care of the children (Fuseina, 19-year-old female, Grade 12).

4.2.2. Sources of hope

Apart from explicating their interpretations of hope, learners reported the means through which such hopeful feelings were engendered. The sources of hope represented three important areas in the lives of learners, including social relationships, spirituality and the self.

4.2.2.1. Social relations

The development of pathway and agency was tied to receiving encouragement from close family members. Family members, especially close kin were referred to as agents of hope because their support enabled adolescents to persist in the pursuit of their goals. In addition, it would seem that motivation and hope were regarded as being intertwined in the goal-pursuit process.

... Our parents bring hope to us. They bring hope to the hopeless. What I am saying is that they sometimes motivate us (Sanni, 19-year-old male, Grade 12).

Furthermore, adolescents noted that motivation from parents had a positive impact when they were able to reflect on the relevance of the information being provided. Learners' thoughts of a positive future and confidence in the future was derived from informational support from close family members. Relatedly, learners emphasised that parents seemed to be cognisant of their responsibility to provide such support, which in turn fostered hopeful thoughts among them.

... [My parents] will make sure that they motivate me, they will advise me to learn very well, do this and do that. Don't follow bad friends, and all those kind of things that will even motivate you if you are a good thinker or a critical thinker, you will know that what your parents are telling you is really good (Sanni, 19-year-old male, Grade 12).

Actually it's only my sister that gives me a sense of hope (Suleman, 20-year-old male, Grade 12).

Apart from family members, significant others including teachers assisted learners in recognising their strengths and capitalising on these strengths as a means of fostering a sense of agency. An important observation from learners' reports was the impact of external influence in the development of agency. This suggests that the development of a sense of agency should not be the prerogative of the learner alone but must include the contribution of significant others in the learners' environment.

I do have people who try to encourage me, many of my masters (teachers) do encourage me, [they tell me] that I don't hesitate when I am talking ... I am a bold person (Suleman, 20-year-old male, Grade 12).

4.2.2.2. Agency and current achievement

As mentioned previously in learners' description of hope, confidence in their ability to achieve set-goals was not only a crucial aspect of hopeful thinking but also a source of hope for the future. This confidence in their ability and feelings of agency were engendered by their current success, especially in academic domains.

For example my performance in class gives me hope (Mohammed, 17-year-old male, Grade 11).

Definite resolution to exert every effort possible was also reiterated as an important source of hope. Moreover, the need to struggle connoted the presence of stressors that could hinder the realisation of goals. Hopeful thinking in this context encapsulated evaluating one's current situation and drawing strength from one's self towards realising a better and fulfilling future.

I know I can do everything, I will struggle and get a better future for myself. It's just about me, how I am able to work hard (Hassana, 19-year-old female, Grade 12).

4.2.2.3. *Spirituality in hopeful thinking*

Apart from social relations, religion was described as being embedded in learners' conceptualisation of hope, particularly as an emotional resource for coping amidst frustration and stress. Religious expressions included offering prayers since adolescents perceived God as the one who controlled their life. Accordingly, spirituality and the belief in God fused with a positive outlook towards the future were reported as important sources of hope, despite the current unfavourable circumstances that learners encountered.

Sometimes I pray to God knowing that one day things will be better. Prayers are the key to any success (Sanni, 19-year-old male, Grade 12).

Religion also played a role in providing some emotional respite from frustrated goals and an assurance that subsequent needs or aspirations would be met. In a similar vein, as a result of the salient role of spirituality, hope was conceptualised in a manner where previous failures did not deter optimistic thoughts about the future, as illustrated in the following extract:

Yea, like ... if I need something and I didn't get it... like for example, I told my parents that I need money and they say they don't have and I will say ok by the grace of Almighty Allah you will get it (Saida, 18-year-old female, Grade 11).

Spirituality was also intricately tied to hopefulness in a manner that suggested a symbiotic relationship between learners lived existence and the supernatural force's omnipresence in that life. Relatedly, adolescents described the omnipresent nature of God as influential insofar as the learner exerted necessary efforts to achieve their goal. Moreover, some learners felt that their efforts were pertinent to receiving God's blessing over their work. The excerpt below mirrors the relative importance of individual effort in the actualisation of goals.

I am sure of a bright future because right now I am good in class; I perform well, so I know definitely that if God permits and I write [my exams] I will pass (Amina, 19-year-old female, Grade 11).

4.2.3. Dynamics of social support systems and other relations

Social relations emerged as an important aspect of the lives of many school-going adolescents in the current study. These adolescents provided compelling representations of how the social exchanges in their support systems were interpreted, perceived and utilised. These representations included a description of the differential impacts of social support emerging from the family and school environment as they pertained to the promotion of the well-being of learners. Although most learners conceptualised support systems positively, a number of learners identified some relations as more beneficial than others.

4.2.3.1. Familial systems and social support

In order to fully understand the dynamics of social support in the family, it was important to consider the reports of the frequent occurrence of family separation through divorce and the creation of new families through remarriages. These occurrences seemed to have implications for social exchanges in the family. It would seem that the frequent occurrence of divorce and remarriage resulted in an increase in the structural characteristics (number of people) of adolescents' support network. However, the fact that there were supposedly a number of support systems from which to enlist assistance, learners still expressed a sense of neglect because family members, who were supposed to be directly responsible for catering for the learners' basic needs declined to do so. The learners' perceptions of social support therefore reflected dissatisfaction with the structural dynamics of some of their network systems. The following excerpt captures this phenomenon:

My parents are divorced and ... My mum [had] asked me to stay with her but I chose to be with my dad. ... She got annoyed and said she won't take care of me again because I chose to be with my dad. My dad has married another wife and she has 2 children. I find it difficult in life sometimes. At times he [my dad] will ask me to come

home and there will be no money...I know mum has money but she will never give it to me (Rashia, 18-year-old female, Grade 11).

Moreover, the frequent feeling of dissatisfaction and the lack of effective interaction had the propensity to negatively affect the adolescents' emotional well-being.

I always have problem with my step-mother. I always think that if you ask something from my father she will always ask my father not to give you. I think so because she always talks about us badly. These things make me unhappy most of the time.

As for my mother, since my primary 5 till now, it was just my year 2 first term that I saw one of my uncles and then he gave me her number. I used to call but I have not seen her since that time till now. She wants to see me but she is not here gain, she is staying at a certain place, Gokpe. I miss my mother, she is married to a certain man and she has two children... (Husein, 20-year-old male, Grade 12).

Some other adolescents provided favourable reports of the kind of support they received from members of both their nuclear and extended families. The large family sizes and the inclusion of the extended family in the daily lives of some of these participants were reported to engender feelings of closeness and increased emotional support.

I like my family, yea especially my auntie, every secret of mine my auntie knows and she is a very good woman. I like the way she is, so we have taken our auntie like our friend. For our family we are all one, we make things equal, we do everything in the same way, and no one will cheat the other. We do everything together ...even when we are cooking we cook the same thing. When my father comes home maybe in the afternoon or evening we all come together and sit and insult and chat and play and do everything together. Then we all go back and sleep (Amina, 19-year-old female, Grade 11).

Noteworthy was the cordial parent-child relationship that was presented. Despite the fact that some learners complained about the structural dynamics of the family, others enjoyed beneficial interactions from the social exchanges that occurred between them and members of their family.

I relate well with my family most especially my mother (Ahmed, 20-year-old male, Grade 11).

The family was also credited with providing adequate emotional support, all the more so in instances where family members were limited in their ability to provide instrumental support such as meeting financial obligations. Learners noted that despite the present financial limitations of their family members, these close-kin relatives were cognisant of their needs and they desired to satisfy these needs. This desire to provide adequate support to learners induced favourable perceptions of support from them.

...and I like that my family shows me emotional care but just because of the financial problem, they cannot provide for me the way they wish to (Salim, 20-year old male, Grade 12).

Yes they [family] always try their best, even though it is not enough they try their best for me (Ahmed, 20-year-old male, Grade 11).

Some other adolescents enjoyed both instrumental and informational support from family members and they evaluated these kinds of support as beneficial.

My family support me financially and from time to time they call to give me advice. I get impressed when I am advised by my parents and all the bad things that they talk about I stop it (Issahaka, 19-year-old male, Grade 12).

Among adolescents in the present study, social support was also manifested in the family as a system of social relations that was influential in the provision of care and determination of career-related pursuits. Although familial engagement in educational pursuits was

appreciated, there was a sense of dissatisfaction among some learners after the consideration that proposed goals (those suggested by family members) were quite disconnected from what they (the adolescent) actually desired. Support in some cases was, therefore, perceived as less adequate in meeting career-related needs. Moreover, the opinion of family members was based on the notion that certain occupations would guarantee immediate employment upon the completion of the learner's education. Given that most of these learners came from relatively deprived socio-economic backgrounds, familial influence in goal pursuits was primarily tied to their current socio-economic situation. Accordingly, family members were extremely concerned about the future of the learner, and in some respects, their own future.

One of my sisters used to tell me that she has a friend who works at the Tamale Nursing Training College and that friend is the administrator of that institution. She used to tell me that I should try my possible best and make it [pass my exam]; she said that man she used to tell me about will help me get admission to the training college. But I do not want to be a nurse, when I imagine myself in the dressing coat of a nurse or a doctor I do not think it fits me. ... I want to be a lot, but I want to be a political scientist, if possible a lecturer in the university. I want to teach political science. Journalism is also my ambition... (Suleman, 20-year-old male, Grade 12).

4.2.3.2. Valued support from friends and “face-saving”

Social relations in school were influential in meeting the instrumental needs of adolescents. However, as much as social support was valued from friends within educational contexts, learners expressed a constant overlap between the need for support from peers and the underlying need for face-saving.

I prefer to be in school ...I have some friends whom I can tell when I need something because they will not broadcast it to other people. If I don't have [food] my friend will give me rice and oil and I will go and cook (Saida, 18-year-old female, Grade 11).

However, emotional support was found not to require face-saving because of its reciprocal nature. Each learner provided support for the other by their mere presence in mundane activities and daily academic routine.

Sometimes we do group studies, go to eat together, and we learn together (Sanni, 19-year-old male, Grade 12).

Valued support was also portrayed among networks in school in the form of companionship. This form of companionship played a crucial role in offering a temporary relief from the emotional turmoil, which was due to personal loss as was illustrated by this learner who had lost her mother:

Sometimes when I am with my [school] friends, they say things that make me laugh. So if I am with my friends I get happy. But if I am in the house I always think about my mum and I cry (Rashida, 18-year-old female, Grade 11).

Apart from providing emotional support, peers at school were also a source of other forms of instrumental support, for example intellectual assistance.

Oh yes, in academics, when I don't understand something they will try to help me explain what they understand about a topic (Mohammed, 17-year-old male, Grade 11).

4.2.3.3. Negative facets of social relations

Although, most learners presented favourable perceptions of their support systems from family and friends, there were instances where the conventional “wisdom” of the support offered in these relationships were questioned. This questioning provided alternative views for how such social networks could be conceptualised. An example of one of the conventional “wisdoms” that was questioned was the validity of the claim of the family as a source of nurturance. The debatable status of this claim left some learners with an attenuated

sense of belonging, which was seemingly detrimental to their emotional health. The excerpt below captured this feeling:

My parents do not make me happy, it's like they do not appreciate it when you come home. Sometimes they will specifically persecute you as if you are not part of them. ...My mother is better than my father, she treats me well. For my father, there is still some crisis between me and him (Sanni, 19-year-old male, Grade 12).

Instead of an experience of nurturance, some learners expressed neglect with regards to the attitudes of parents towards their social and financial needs. This is illustrated in the excerpt below:

My parents don't want me to go to school and when you try to explain to them [the importance of education] they will not mind you. ...In order to get money to go to school, I go and farm. ...When I am going to school, my father does not call me to ask me about my education (Mahama, 22-year-old male, Grade 11).

Occasionally, the absence of a family's breadwinner affected the provision of care and created the need to enact new social relationships, which impacted negatively on the well-being of some learners. Moreover, in order to ensure that adolescents could continue to receive care and support, educational pursuits were frequently disrupted as adolescents endeavoured to maintain the newly formed relationship with extended family members. The new relationships were sometimes characterised by ill-treatment from the new care-giver resulting in a feeling of being "trapped" in a problematic relationship that did not promote well-being.

When my mum died, my father did not have enough [money] so he sent me to my aunt to take care of me, so I can continue to go to school. ...Sometimes she [my aunt] will treat me in a way [I do] not like (Hassana, 19-year-old female, Grade 12).

Some adolescents reported that feelings of betrayal and alienation followed the evaluation of the overall availability of companionship and support from friends. In addition, support seemed not to be reciprocated in a manner that would suggest a symbiotic relationship in the social support system, but a change in the structural dynamics when an individual was in need of support. This feeling was captured from the interview with a learner who complained bitterly about her friends.

...When most of my friends see that I don't have [money] they run away from me. But if I have something small, they come to me. Because of this, I do not have any friends now (Rashida, 18-year-old female, Grade 11).

Furthermore, the conventional “wisdom” of support got questioned insofar as soliciting support from an individual’s network resulted in lowered sense of self-worth. One learner had this to say:

But in school if I ask anyone for something I feel ashamed. I don't like taking things from friends because they will say something I don't like... (Rashida, 18-year-old female, Grade 11).

4.2.4. Global evaluation and meaning-making

Learners presented their interpretations and experiences of life satisfaction from different perspectives, and each of these perspectives was identified as instrumental in engendering life satisfaction. One of the perspectives that was mentioned was the connection between life satisfaction and goal attainment. The excerpt below captures this notion of life satisfaction.

To be satisfied in life means to achieve the goals that you have set (Ahmed, 20-year-old male, Grade 11).

Another perspective in the interpretation of life satisfaction that emerged from learners' reports was the prerequisite of having resources that were adequate in meeting the learners' needs.

Life satisfaction refers to whether I have everything that I need (Salim, 20-year-old male, Grade 12).

The evaluation of an individual's life as satisfactory was also interpreted in light of peer evaluation and perceptions, thus this positive experience was understood as being tied to how the learner was perceived by significant others. Learners intimated that a positive perception of oneself by their peers fostered a favourable judgement of their life as satisfactory. Positive self-image, which was important for life satisfaction, seemed to be determined by a significant other's evaluation of the learner. Relatedly, learners would rather endeavour to alter their behaviours in order to solicit favourable perceptions from their peers.

...Sometimes it is [about how] people see you. For instance, if people talk about you in a good [way] it makes you say you are satisfied with your behaviour. ... But if they think of you negatively then you [have to] strive towards redeeming your image (Musa, 17-year-old male, Grade 11).

4.2.4.1. Sources of life satisfaction

In addition to relating what being satisfied with life meant to them, learners intimated several factors that influenced the evaluation of their lives as satisfactory and one of these factors was the feeling of autonomy and self-determination. The overall assessment of learners' lives was intricately tied to feelings of control over their lives and the ability to cater for their own needs rather than relying on their parents. The excerpt below captures this idea:

I think when I am independent and I can think for myself, I will be satisfied (Issahaka, 19-year-old male, Grade 12).

As opposed to the need for self-determination, parental involvement and support for education was identified as instrumental for promoting life satisfaction. In the Northern region of Ghana, where the education of girls was deemed unnecessary, social support directed at promoting education was regarded as important for life satisfaction. Moreover, participants' position of privilege relative to other peers who were from deprived backgrounds engendered favourable assessment of their lives as satisfactory.

Yes [I am satisfied] because my parents have been able to send me to school... I feel happy when I am in school because I know some of our colleagues are still at home and they are not schooling (Amina, 19-year-old female, Grade 11).

Relatedly, satisfaction with life was found to be engendered by maintaining positive social relations with others in the network system of the adolescent. Moreover, reports from adolescents depicted an association between maintaining positive relations with others and receiving approval from peers.

*Yes my life is okay because I don't have any problem with anybody
I like my life, the way I live and behave with my friends; I like it (Ahmed, 20-year-old male, Grade 11).*

...if I am with my colleagues we always chat and after chatting, we will go to class and learn, all these makes me feel ok. It makes me satisfied (Fuseina, 19-year-old female, Grade 12)

Yes my life is pretty good, my friends like me, they see me so that I give them advice, I see them and they give me advice. It is pretty good (Mohammed, 17-year-old male, Grade 11)

As learners reflected on their current performance in school, it provided some sense of satisfaction. Adolescents' sense of satisfaction was influenced by the fact that their current success strengthened their hope for a fulfilling future. It would seem that there was an

interaction between a learner's current performance, hopeful thinking and life satisfaction, but all these seemed to have a limited impact on some learners' sense of satisfaction as illustrated below:

There are some things that make me a bit satisfied now. ...For example, my academics ...I know that I am improving, and that makes me think that I will be someone in future (Amina, 19-year-old female, Grade 11).

Furthermore, it would seem that having adequate material resources was equally central in engendering life satisfaction. Although learners had no control over the availability of material resources compared to academic success, these two factors seemed to complement each other in engendering life satisfaction among some learners.

When I have money with me or if I write an exam and I pass I feel happy ...but when I don't get those things [money and success] I do not feel satisfied (Saida, 18-year-old female, Grade 11).

4.2.4.2. Sources of dissatisfaction

It is noteworthy that participants related factors that resulted in dissatisfaction with life and these factors seemed to mirror their sources of satisfaction with life. For instance, learners evaluated their lives as less satisfactory when they failed to meet certain personal and societal standards.

The reason why I said am not satisfied is because by this time I should have finished Senior Secondary School but now am still in SSS2 (Ahmed, 20-year-old male, Grade 11).

Further frustration came with the recurrence of unfavourable outcomes in academic domains. A sense of despair is captured in the excerpt below where the learner felt perplexed and baffled by the continuous frustration of her goals.

... I wanted to be the best in the class but I could not, I wanted to be ahead of some people but I am middle. I am trying but I do not know why (Hassana, 19-year-old female, Grade 12).

Adolescents' dissatisfaction with their school performance was found to negatively impact the global evaluation of their life. The saliency of academic success for life satisfaction was emphasised as learners felt disappointed when they did not experience absolute success in their educational pursuits.

As for me, for instance I am good in maths but as for other areas like science and social [studies] I am not good in it. For that matter I conclude I am not satisfied in life. Being satisfied in life means you are okay with all areas (Nurudeen, 18-year-old male, Grade 12).

The excerpt above revealed that some learners considered it almost impossible to be satisfied with life if certain domains of their lives were not as they previously anticipated. Given the pervasive influence of academic success on the general evaluation of life and the importance attached to the opportunity of being enrolled in school, it was not surprising to find that learners were dissatisfied with life when there were challenges with their education.

Apart from having goals that were frustrated, the absence of financial support was a source of dissatisfaction. It would seem that learners had certain expectations of their support systems that were not met, resulting in feelings of frustration, discontentment and dissatisfaction.

Sometimes I do not like some things about my family. Sometimes you will tell them to give you school fees or your chop (pocket) money has finished, and they will be giving you story and saying there is no money. If you are telling me there is no money, what are you expecting me to do? Are they expecting me to go to someone else and collect the money or what (Saida, 18-year-old female, Grade 11).

Additionally, reports of distress in the daily struggle to find the necessities of life were an apparent cause for learners to evaluate their lives as unsatisfactory.

Mmmm financial problems do not make me satisfied. ... My parents are farmers and they don't have enough money, so if am in school and I am short of money I suffer. I will suffer before I get it ... (Amina, 19-year-old female, Grade 11).

4.2.5. Material deprivation

One pervasive stressor that almost all the learners that were interviewed attested to was poverty. This theme was included in order to further explain the life situation of most of the participants in the current study. Most of the school-going adolescents were from poor socio-economic backgrounds and had to struggle to secure enough money to feed and settle educational expenses. Given that there was barely enough to cater for the learners' basic needs, daily subsistence was a constant challenge and a source of stress. Furthermore, learners expressed a sense of responsibility for catering for their needs rather than relying solely on parents who were incapable of satisfying these needs. Learners also appraised their current life situation as having a negative impact on their education and physical well-being. The excerpts below capture this theme:

Sometimes, we do need sandals and singlet. ...Sometimes I cannot come to school because I have one short, I wash it in the evening and it does not dry well, because of that I cannot come to school the next morning. ...Sometimes [pocket money] is also a problem. ...Our parents are poor ...We students have to take care of ourselves. Can you imagine spending 1 cedi, every day, morning and evening? (Sanni, 19-year-old male, Grade 12).

... I am from a poor family, and [there] will be days where I take only 20 GHp⁸ to school, [and wait till] I go back home and take lunch. The waakye (beans and rice) is from 50 GHp⁹ and 1 GHc¹⁰. The 20 GHp can only buy porridge. ...Even when I am hungry, I have become [used to it] that I do not feel the hunger anymore (Abiba, 21-year old female, Grade 12).

4.2.6. Resources for coping and well-being

Resources for well-being are those assets that the learners in the present sample reasoned to be salient for coping with daily stressors, including financial and academic difficulties. Given that having adequate resources was important for the evaluation of one's life as satisfactory, it was necessary to further explore these resources.

4.3.6.1. Networking and economic engagement

Problem-focussed coping through economic engagement with the adolescents' social support networks was reported as a viable resource for dealing with the stress resulting from financial difficulties. These networks assisted with practical support, which involved providing an opportunity for learners to become engaged in economic activities that were instrumental in catering for their needs.

...I need books and money to feed myself. Sometimes I go home and they [parents] do not have money for me. [So] when I go home I work, I sell things in the market with a sister [a relatively older, respected lady] so that by the time I am coming back to school she will give me some money (Hassana, 19-year-old female, Grade 12).

⁸ 20 GHp is the equivalent of 5 cents in US dollars, as per the November 2015 exchange rate.

⁹ 50 GHp is the equivalent of 13 cents in US dollars, as per the November 2015 exchange rate.

¹⁰ 1 GHc is the equivalent of 26 cents in US dollars, as per the November 2015 exchange rate.

Apart from soliciting help for learners' financial needs, support networks were utilised in academic domains to enhance the learners' competence and to increase the propensity for success. Learners expressed active coping when they felt they did not have the adequate personal resource to combat the stress they encountered.

Most of the times a teacher may teach something and I will not understand it ... what I do is to look for someone who knows [that subject better] so the fellow will guide me. Sometimes when I am hungry, and there is no food, I get stressed out. I try to find someone to help (Ahmed, 20-year-old male, Grade 11).

4.2.6.2. Other external resources: The role of non-governmental organisations

Non-governmental organisations (NGOs) were identified as active agents of change in the Northern region of Ghana. Most of these NGOs were involved in promoting farming activities while others were interested in promoting education. Non-governmental organisations provided external resources such as financial support for school-going adolescents in the Northern region, thereby facilitating the coping and well-being of learners that had ever been beneficiaries of their charity.

...actually, me for instance when I was in primary[school] there was an NGO institution known as ACTION AID in Tamale. When I was about to go to my primary [school], the NGOs sent me there [and paid for my school fees], because by that time [my parents] did not have money to pay my school fees (Salim, 20-year-old male, Grade 12).

... Some people were here [to assist with] girl-child education and they said 'if you are a girl and you pass your SSS education and you do not have money, they

[CAMFED Ghana¹¹] will pay for your education' (Fuseina, 19-year-old female, Grade 12).

These resources combined served to enhance the well-being of the present sample of school-going adolescents.

The preceding paragraphs represent both the quantitative and qualitative results of the constructs under study. The quantitative results showed the significant pathways, while the qualitative results revealed contextual information on how these constructs are interpreted and related to one another among adolescents in the Northern region of Ghana. The next chapter is a presentation of the discussion of the above findings.

¹¹ CAMFED stands for Campaign for female education.

Chapter 5: Discussion

This chapter is a presentation of the discussion of findings outlined in chapter four. These findings will be discussed in light of existing scholarly work. Quantitative and qualitative findings were merged in the discussion in order to demonstrate that the qualitative findings were able to describe some of the relations observed in the quantitative phase of the study. This chapter concludes with a summary of the major findings.

5.1. General Discussion on Model Fit

The aim of the current study was to explore hope, perceived social support and life satisfaction as aspects of mental health among school-going adolescents in the Northern region of Ghana. In order to achieve this aim, the method of structural equation modelling (SEM) was used to test whether the hypothesised partially mediated and direct relationships between hope, perceived social support, life satisfaction, psychological well-being and psychological distress would fit the observed data. Confirmatory factor analysis (CFA) was used to determine whether the various item parcels (which were used as indicators) loaded strongly onto their relevant latent variables, and to determine their levels of significance. The results of the study revealed that each of the latent variables was well represented by their indicators and the hypothesised measurement model demonstrated a good fit with the data.

The hypothesised structural model determining the relationships among the latent variables was found to have a good fit with the observed data. Moreover, some of the postulated direct and mediated relationships were confirmed. In addition, the model comparing males and females also yielded a good model fit. The results of introducing gender into the model illustrated that male and female adolescents did not differ markedly in the hypothesised structural relations among the latent variables. Furthermore, the hypothesised model was useful for explaining psychological well-being but not psychological distress. The following is a summary of the hypothesised direct and mediated relationships

that were confirmed. Hope was found to be positively related to life satisfaction but not psychological well-being. There was a significant positive relationship between perceived social support and psychological well-being, perceived social support and life satisfaction, and between perceived social support and hope. Life satisfaction was also found to be significantly positively related to psychological well-being. The relationship between perceived social support and psychological well-being was partially mediated by life satisfaction. In other words, increased perceived social support and life satisfaction would jointly influence the adolescent's increased experience of psychological well-being.

Relatedly, the relationship between perceived social support and life satisfaction was partially mediated by hope. The positive relationship between hope and psychological well-being was, however, fully mediated by life satisfaction. The implication of these findings is that perceived social support and hope, mediated by life satisfaction, could result in an increase of the adolescent's experience of psychological well-being.

The findings of the current study provided partial evidence for Keyes' dual continuum of mental health. Keyes (2007) espoused that increasing levels of positive psychological indicators were important for flourishing mental health, which was different from the continuum measuring mental illness. It would therefore seem that different indicators would explain the movement on the continuum of mental ill-health. In a later study, Keyes and colleagues argued that flourishing mental health tends to have some influence on mental ill-health by reducing the propensity for mental illness (Keyes et al., 2012). The findings of the current study are slightly different from Keyes' proposition, in as much as the hypothesised model was able to explain psychological well-being but did not show any relationship between psychological well-being and psychological distress. This implied that increase in positive states did not have any impact on the negative state of psychological distress. Suldo et al. (2014) indicated similar results in an intervention program for adolescents that resulted

in increased psychological well-being, but had no impact on psychopathology. The lack of relationship between psychological well-being and distress provided preliminary evidence for the claim that well-being is not simply the absence of ill-health. Moreover, Keyes et al. (2012) has noted that it is not impossible for a person with flourishing mental health to have an incidence of mental illness.

This finding on the lack of relationship between psychological well-being and some indicators of mental ill-health has also been partially supported by Kern, Waters, Adler, and White (2015). Kern et al. (2015) noted that there were only weak and moderate correlations between ill-being (anxiety and depression) and the PERMA (comprising positive emotions, engagement, relationship, meaning and accomplishment) model of psychological well-being. In a similar vein, the pattern of correlations showed that only loss of behavioural and emotional control was significantly correlated with two indicators of psychological well-being, namely general positive affect and life satisfaction. This finding seems to support the dual-continuum model of mental health.

In contrast to Antonovsky's (1979, 1987) proposition on salutogenic factors preventing breakdown, the present study revealed that the salutary factors of hope, perceived social support and life satisfaction were more instrumental in promoting well-being compared to the reduction of distress. In salutogenic terms, these factors moved the adolescents closer to the health-end of the continuum. Although, similarities have been drawn between sense of coherence (SOC) and the constructs under study, it would seem that these constructs pertained to psychological well-being and not the prevention of psychological distress.

Qualitative findings on how adolescents' hope, perceived social support and life satisfaction were engendered is discussed, where applicable, in relation to the quantitative results on the statistical relations among variables. These findings are discussed in depth in relation to the literature on positive psychology and mental health.

5.2. Hope and Psychological Well-being

Inconsistent with the study's hypothesis, data from the current study demonstrated that there was no significant direct relationship between hope and psychological well-being. The lack of significance was surprising and warranted further discussion, considering previous studies have demonstrated that hope was an important predictor of adolescent psychological well-being (Ciarrochi, Heaven, & Davies, 2007; Esteves et al., 2013; Gilman et al., 2006; Guse & Vermaak, 2011; Hexdall & Huebner, 2007; Proctor et al., 2011; Rand & Cheavens, 2009; Snyder, 2000; Vacek, Coyle, & Vera, 2010).

Although, extant research has proven the relationship between hope and psychological well-being, it is worth noting that Marques et al. (2011), in their study of building hope, did not find any significant relationship between hope and mental health. Even though this was an intervention study, it showed that there might be other factors influencing the relationship between hope and mental health. Therefore, there is a need for further research to establish conclusive evidence on what indicators of psychological well-being could be predicted by hope.

It is possible that the lack of a significant relationship between hope and psychological well-being could have been due to the measure of psychological well-being that was used and the method of statistical analysis, which was carried out. Most studies have adopted life satisfaction as the main measure of psychological well-being (Vacek et al., 2010; Yarcheski et al., 2001) without considering the possibility of a latent construct comprising different indicators (positive affect, emotional ties and life satisfaction) of well-being. For example, Bronk et al. (2009) used life satisfaction as one of the major measure of psychological well-being that was predicted by hope.

Relatedly, Shorey et al. (2003) found that hope was related to mental health, when mental health was measured as an outcome latent variable comprising, general positive affect,

depression, anxiety and loss of behavioural control. The other indicators of psychological well-being (emotional ties and life satisfaction) failed to emerge as strong indicators of this construct. It is therefore possible that hope is less able to predict multiple positive indicators of well-being that have been combined to form a latent variable. This could also mean that the measure of psychological well-being adopted, in the present study, might require further external validation in order to establish viable explanations on the relationship between hope and mental health. Additionally, a number of studies that have been reviewed in this dissertation, did not employ the method of SEM in determining the relationship between hope and psychological well-being. The few studies that have adopted this technique (see Ng et al. 2014; Shorey et al., 2003), did not measure psychological well-being the way it was measured in the present study. This might explain the difference between the finding in the present study and previous scholarly evidence on the relationship between hope and psychological well-being.

Although, there was no significant relationship between the latent constructs of hope and psychological well-being, results of the bivariate correlations revealed that the subscales of hope (trust and confidence, positive future orientation, social relations and personal value) were significantly related to the general positive affect subscale of psychological well-being. Notable, is the pattern of correlation that provides preliminary support for the present study's hypothesis and also partially reflects the findings by Shorey et al. (2003) (on the relationship between hope and positive affect). This pattern of correlations also supports the argument that hope might not be able to predict well-being when well-being comprises a combination of multiple positive indicators. A plausible explanation for the bivariate correlations in the present sample is that adolescents could have experienced positive emotions when they appraised financial and academic stressors as manageable, and were also confident in their abilities to achieve set-goals. This interpretation is in line with Snyder's (2002) theory of

hope, in which the feedback and feed-forward process that transpires in the goal-pursuit process are accompanied by emotional sets that are influenced by either the appraisal of the stressor or the success of the goal-pursuit process. The success of the goal-pursuit process, in turn, produces positive emotions that iteratively feed into future goal-pursuits. It is worth noting that data from the qualitative findings provided support for Snyder's hope theory insofar as the current sample of adolescents described hopefulness in relation to their personal sense of agency and confidence in their current academic performance.

Additional, insights from the findings of the qualitative data showed that during the goal-pursuit process, agency thinking could be influenced by religion. In the present study, adolescents reported that they looked forward to a better future because they believed that God would enable them to achieve their set-goals. It is possible that the bivariate correlation between the subscales of hope and general positive affect, among the present sample of adolescents, was due to their faith in God influencing the development of confidence and plausible avenues for achieving set-goals. From participants' accounts, it would seem that faith provided the assurance that the supernatural being would assist them in accessing both their educational and other goals. Moreover, the role of spirituality in enhancing hope for the present sample of adolescents could have been underscored in the expressed belief of being "empowered" to achieve their goals owing their perceived experience of the Deity's omnipresence in their lives. This finding of the current study concurs with Bernado's (2010, 2014) proposition on the internal and external locus of hope.

According to Bernado (2010), the external locus of hope refers to how other individuals reinforce the motivational component of hope. These could include religious forces, family and significant others. The present finding on the possible influence of religion on agency thinking adds to the theoretical understanding of how hope could be engendered in the Ghanaian context. This finding also highlights the need for additional interpretations of

hope since predominant positive psychological theories have been centred on the individual's ability to develop pathway and agency thinking, with minimal consideration of the external influences that take place during this process.

Further research using alternative statistical methods and measures of psychological well-being is required to establish conclusive evidence on the relationship between hope and psychological well-being.

5.2.1. Hope and life satisfaction

In line with the hypothesis, the present findings showed adolescents' experience of hope to be significantly related to life satisfaction. This implied that the more hopeful participants were about aspects of their future, the more likely did they evaluate their lives as satisfactory. This finding was in line with previous studies exploring the relationship between hope and life satisfaction (Gilman & Huebner, 2006; Marques et al., 2011; Proctor et al., 2009; Suldo et al., 2014; Valle et al., 2006).

The relationship between hope and life satisfaction could be underscored in the buffer effect of hope as an adaptive coping strategy. In this sample, it was possible that when adolescents appraised the demands of a stressor as manageable, while having identified the necessary pathway, life satisfaction ensued. The ability to envisage a successful future, because stressors were appraised as manageable, provided the platform for adolescents to judge their lives as satisfactory. Given that adolescents are preoccupied with anticipating the future (Coleman & Hagell, 2007), it would stand to reason that the ability to envisage a successful future could be crucial to their current life satisfaction. Additionally, the ability to establish the necessary pathways towards the adolescents' goal could have been salient for reducing anxieties about the future, thereby making the adolescents' world seem structured, predictable and even satisfactory. It is also possible that the success of the goal-pursuit process enabled adolescents to judge their lives as satisfactory (Snyder, 2002). The present

results corroborate the ideas of Guse and Vermaak (2011), who suggested that adolescents' experience of hope was related to life satisfaction irrespective of their socio-economic background. This might indicate that, although, adolescents in the current study were faced with socio-economic challenges, satisfaction with the current state of their lives was dependent on their ability to envisage a successful future.

The possibility of hope having a buffering effect against the challenges that adolescents faced appears to be consistent with the salutogenic theory (Antonovsky, 1987, 1996). The central tenet of this theory is that there is a need to focus on salutary factors for health and well-being. Based on this theory, it would appear that adolescents in the present sample had experienced satisfaction with life (a form of ease and positive orientation) when they evaluated their current challenges and future aspirations as meaningful. Although salutogenesis focusses on the individual's sense of coherence (SOC), this construct, as discussed in Chapter 2, shares some similarity with the construct of hope. This similarity is underscored in the meaningfulness component of SOC that refers to the extent to which an individual views the demands of life as worthy of investment and engagement. Therefore, the more adolescents perceived their future aspirations as meaningful and manageable, as a result of the availability of the necessary pathway, the greater the likelihood for life satisfaction to ensue. Data obtained from the follow-up interviews also showed the relationship between hope and life satisfaction, as the adolescents described their sense of satisfaction through highlighting their ability to reach set-goals. To this effect, life satisfaction was intricately tied to an experience of agency and fulfilment of their goals while most of these goals were in academic domains.

Most research on hope and life satisfaction has been correlational in nature making it difficult to draw causal inferences. However there are few longitudinal studies (Marques et al., 2011) and intervention studies (Green et al., 2007). It is also of interest to note that some

research evidence has pointed to hope as a consequence of high life satisfaction (Gilman & Huebner, 2006), while most studies tend to consider life satisfaction as a consequence of hope (Bronk et al., 2009; Edwards, Ong, & Lopez, 2007; Gilman et al., 2006). Studies that have identified hope as an antecedent of life satisfaction espouse that pathway and agency thought were necessary for the experience of life satisfaction, and this interpretation concurs with the present finding. The present study has provided further evidence for the association between these constructs insofar as the use of SEM, although unable to ascertain causal relations, proffered robust evidence for the possible direction of the relationship between these latent variables. The current finding suggested that hope was the predictor variable, while life satisfaction was the outcome. This conclusion was possible because the model that was hypothesised, with hope acting as the predictor and life satisfaction as the outcome, had an adequate fit with the observed data.

It can be assumed that life satisfaction among adolescents in impoverished communities within the Northern region of Ghana could be enhanced if these adolescents felt hopeful about their future. Therefore, interventions pertaining to mental health promotion (MHP) that are aimed at increasing adolescents' life satisfaction could include the building of psychological strengths such as hope. Interventions aimed at building hope could include teaching adolescents how to clearly conceptualise their goals and to identify the necessary strategies for achieving those goals. These goals and strategies must be accompanied by the motivation to commence and sustain the chosen course of action. For instance, using a group-based approach, adolescents could be taught to determine and write out what academic goals they seek to achieve. This could be followed by assisting adolescents to choose practical strategies such as putting in extra hours in studying. Additionally, adolescents could be assisted in fostering a sense of agency using self-talks such as "I can" "I will keep at it" (Snyder et al., 2003). Additional hope-fostering strategies could include the affirmation of

adolescents' worth, encouraging self-determination and enabling adolescents strengthen their spiritual beliefs, when applicable (see also Herth, 1990).

5.2.2. Hope and psychological well-being mediated by life satisfaction

In addition to the direct relationships between hope and life satisfaction, between hope and psychological well-being, and between life satisfaction and psychological well-being, a partially mediated relationship between hope and psychological well-being via life satisfaction was also hypothesised. Consistent with the hypothesis, the present finding demonstrated that life satisfaction was a mediator of the relationship between hope and psychological well-being. Although, a partially mediated relationship was hypothesised, the findings of the present study showed a fully mediated model. While no empirical support was found for the mediated relationship between these two variables, the present finding was not surprising, given prevailing empirical evidence pointing to the direct relationships between hope and mental health (Hagen et al., 2005; Marques et al., 2011; Valle et al., 2006), and between hope and life satisfaction (Bronk et al., 2009; Marques et al., 2013; Ng et al., 2014).

The positive relationship between hope and psychological well-being was fully mediated by life satisfaction because, while there was no direct relationship between hope and psychological well-being, there was a significant mediated relationship through life satisfaction. An interpretation of the present finding could be that adolescents, in the Northern region of Ghana experienced psychological well-being, when appropriate pathways were accompanied by a satisfactory evaluation of the current events in different domains of their lives. These domains included family, friends, living environment, self and school (the domain of school was peculiar to the qualitative data). It would seem that feeling hopeful impacted on the adolescents' experience of psychological well-being, primarily, when they were also able to judge the current state of their lives as satisfactory. The fully mediated model indicated that without the positive evaluation of life, hopeful thinking could not predict

psychological well-being. Thus, life satisfaction explains the relationship between hope and psychological well-being.

Studies on coping and appraisal could provide some explanation for this mediated relationship (Chang & DeSimone, 2001; Lazarus, 1991; Suldo & Huebner, 2004). While appraisal in coping research focusses on evaluating the demands of a stressor, and how such evaluation influences well-being, life satisfaction is determined by the positive appraisal of an individual's current life situation. Adolescents might have experienced psychological well-being as a result of the fact that they were able to envisage a better future alongside a positive appraisal of their current life situation. The presence of financial difficulties as evident in previous research (Bull et al., 2010) seemed not to impede the experience of well-being when other personal factors (hope and life satisfaction) were present. Relatedly, Du et al. (2015) opined that positive self-evaluation was necessary for positive thinking such as hope to predict well-being. Although self-evaluation was measured differently, the mediating effect of such evaluations provides a partial support for the present finding.

Another possible explanation for the mediated relationship is that life satisfaction is generally identified as an indicator of psychological well-being. This would mean that increase in levels of life satisfaction as a result of hope, could also result in the enhancement of other indicators of well-being. This is also because most positive constructs have been found to be moderately correlated (Huppert & So, 2013). Pertaining to the mediated relationship between hope and psychological well-being, Diener and Chan (2011) noted that it is important to know how life satisfaction and other well-being indicators are related to each other and how they uniquely predict other outcomes. Moreover, the simultaneous consideration of multiple domains (which were hope and life satisfaction), in the present sample, demonstrated a possible pathway to psychological well-being (Kern et al., 2014). For

adolescents in the Northern region of Ghana, the pathway to psychological well-being was depicted in the mediated pathway from hope through life satisfaction.

Findings emerging from the qualitative interviews revealed that adolescents described their sense of satisfaction with life as being related to the successful attainment of goals in academic domains of their life, and such feelings of satisfaction were reported to be simultaneously accompanied by positive emotions. In line with the theory of fortigenesis (Strümpfer, 1995, 2006), which puts emphasis on factors that foster strength at different points on the health-continuum, hope and life satisfaction could be regarded as positive experiences that might have fostered an upward movement on the continuum of psychological well-being. As these experiences increased, there was a greater likelihood for adolescents to experience psychological well-being. It must be noted, however, that the data obtained from the qualitative interviews seemed to offer only a partial explanation of the mediated relationship. This is because the interviews demonstrated only the relationship between hope, domain-specific satisfaction and general positive affect and not the latent variable of psychological well-being.

Given that there was no empirical support for the mediated relationship, further research is needed in this area. As discussed in Chapter 1, although the period of adolescence is filled with challenges such as anticipating the future (Coleman & Hagell, 2007), these challenges could be adequately managed to foster well-being. An implication of the present finding for MHP is that programmes targeted at improving the psychological well-being of adolescents could consider teaching skills for increasing levels of hope and life satisfaction. Life skills programmes that build positive self-esteem and goal-directed behaviours could be adopted to increase hope levels (Patel et al., 2007).

Interventions aimed at increasing life satisfaction could begin from assessing domains in adolescents' lives that are currently yielding negative appraisals. Efforts could be geared

towards teaching adolescents to reappraise their cognitions, fostering positive self-appraisals, and modifying negative self-appraisals. For example, if adolescents are dissatisfied with the “self” domain, then they could be taught to direct their cognitions towards a more positive evaluation of themselves. Additionally, if adolescents are dissatisfied with interactions in the family, family therapies could be carried out to improve on deficient familial relationships. Since most schools in the Northern region have limited human resource for implementing interventions, (which would ordinarily fall within the ambit of mental health professionals including psychologists and trained counsellors) teachers, school counsellors and parents could be equipped with the skills to assist in promoting these positive experiences among adolescents. These individuals could be trained by the few school psychologists currently present in the country. Based on Bronfenbrenner’s bio-ecological theory on the influence of the macrosystem on the developing individual, there is a need for government policies targeted at increasing the human resources working in the area of adolescent mental health.

5.3. Perceived Social Support and Psychological Well-being

The present finding provided support for the hypothesis indicating a significantly positive relationship between perceived social support and psychological well-being. In line with findings from a study of school-going American adolescents, perceptions of available social support were identified as an important factor for overall psychological well-being (Rueger et al., 2010). Wang and Eccles (2012), in their longitudinal study among a group of American seventh graders, also noted that different sources of support were necessary for school engagement and a successful transition to adulthood. Additionally, perceived social support has been identified as an important coping resource among adolescents (Klineberg et al., 2006; Malecki & Demaray, 2003; Ystgaard, 1997).

The present finding could be interpreted as stemming from the perceptions of the availability of support from family and friends having served as a buffer against life

challenges. These perceptions fostered feelings of being loved and also provided an assurance that support would be available when needed. The feelings of being loved could have been accompanied by positive emotional states that might have, consequently, resulted in the adolescents' psychological well-being. The effect of perceptions of social support from significant others on psychological well-being has been noted by Lakey and Orehek (2011). These authors argued that ordinary conversations and shared activities enabled individuals to regulate their affect and cognitions in ways that enhanced their psychological well-being. The findings of the present study also concurred with research evidence that demonstrated that the individual's experience of psychological well-being was dependent on relational provisions of social support (Weiss, 1974; Yarcheski et al., 2001). Likewise, the perceptions of the availability of such support seemed to enable adolescents to navigate the physical, social and biological changes occurring at this stage of development.

It is noteworthy that the relationship between perceived social support and psychological well-being is also apparent in low-resource contexts. Although, adolescents in impoverished communities in Ghana had limited resources, perceptions of the availability of support has been found to be associated with well-being (Amoah & Jørgensen 2014; Glozah & Pevalin, 2014; Wilson & Mittelmark, 2013). Similarly, South African youths in impoverished communities also depended on the family community to aid positive adjustment in the midst of extreme hardship and poverty (Theron & Theron, 2013). Adolescents in the present sample experienced psychological well-being probably as a result of the relational provision of support, which served as a buffer against the stress of living a low-resource context.

It was also possible that the perceptions of the availability of emotional, instrumental and informational support (House, 1981) from family, friends and significant others (Tardy, 1985) might have affected the experience of psychological well-being among adolescents in

the present sample. This was evident in the qualitative findings where adolescents described the different kinds of support they received and how these impacted their well-being.

Adolescents noted that parents, siblings and step-siblings, aunties and friends at school were important sources of support. Additionally, emotional support was described as primarily emerging from family members and adolescents were appreciative of the love and care they received. Informational support from parents was regarded as crucial for deciding probable career paths, resulting in a reduction of stress in that area of the adolescent's life.

Furthermore, adolescents intimated that their family members provided suggestions on career paths that they (the adolescent) could undertake. In the present sample, support from friends was described as, primarily, instrumental although there were instances where adolescents described the presence of emotional support from friends. The presence of these different support sources might have facilitated the adolescent's well-being, especially against financial and academic challenges. The qualitative findings also revealed that deficient social exchanges in the adolescents' support network had the propensity of negatively affecting their well-being.

There is further evidence in the literature on the impact of differential support for adolescent well-being (Helsen, Vollebegg, & Meeus, 2000; Rueger et al., 2010; Stewart & Suldo, 2011). Likewise, adolescents in the present sample were dependent on their support systems to provide different kinds of support in order to enhance their well-being. It is also of interest to note that, the adolescents in the present study seemed to place more emphasis on the adequacy of support received from friends rather than from their parents. Helsen et al. (2000) confirmed these findings in their study of adolescents in the Netherlands. They noted that there were changing dimensions, insofar as perceived parental support decreased as friends' support increased, especially from the age of 16 years. Newman and Newman (1995)

also noted that adolescence represents a stage where these individuals seek increasing autonomy from their parents.

The impact of perceived social support from different sources on psychological well-being appears to have been explained by the ecological model (Bronfenbrenner, 1994), which holds the idea that different systems in the social environment play a significant role in the individual's development. Based on the ecological model, the overall perception of support among adolescents in the present sample could have been determined by the effective social interaction at school and the presence of support from parents at home. The adolescents' perceptions of the availability of support from the microsystems of school and home could have, in turn, fostered the experience of psychological well-being, given the documented emotional rewards of the experience of support from significant others (Rueger et al., 2010). Relatedly, the interpretation of the present findings is in line with Antonovsky's (1996) proposition of manageability. In the current sample, it might be that the experience of psychological well-being was due to the fact that, adolescents perceived that they had the necessary resources to meet the demands posed by the challenges associated with their life situation. These resources could have included the perceived availability of social support.

This current finding has implications for developing MHP interventions. These interventions could ensure that adolescents' school environment is characterised by effective and supportive interactions. Interventions could begin from assessing to what extent the adolescents' home and school environments are nurturing and supportive. Home environments that are found to be unsupportive could be rectified through, for example, parent counselling sessions (Yarcheski et al., 2001), directed at encouraging parents to be more supportive of adolescents' school-related needs. Interventions could also be targeted at enabling adolescents reconcile their simultaneous need for autonomy with their need for

support from parents. Such interventions could foster a more fulfilling parent-adolescent relationship.

Supportive school environments could be fostered by implementing programmes that teach adolescents the practice of “give and take” and social skills directed at enacting and sustaining friendships (Yarcheski et al., 2001). Additionally, since adolescents are at a point in their life where they are forming new relationships necessary for their well-being (Petersen et al., 2010), interventions could be aimed at teaching them to reassess ambivalent relationships in order to avoid pessimistic interpretations of their social interactions (see Brand et al., 1995). This is because the perceptions that are formed as a result of daily interactions could influence adolescents’ thoughts of being loved and emotionally connected to others, which are crucial for their emotional well-being.

5.3.1. Perceived social support and life satisfaction

In line with the hypothesis, there was a significant positive relationship between adolescents’ perceptions of social support and life satisfaction. Consistent with the findings of the current study, an existing body of international literature among adolescents has demonstrated the importance of the perceptions of social support for the experience of life satisfaction (Danielsen, Samdal, Hetland, & Wold, 2009; Kapıkıran, 2013; Kong & You, 2013; Oberle et al., 2011; Oh, Ozkaya, & LaRose, 2014; Stewart & Suldo, 2011).

In interpreting the positive relationship between the perceptions of social support and life satisfaction in the present sample, a possibility exists that the presence of quality and reliable relationships among friends and family enabled the adolescent to evaluate their lives in a positive light. These quality relationships with family and friends served as support systems that provided both companionship and practical support when required. The perceptions that such support existed enabled the adolescent to judge their lives as satisfactory. This interpretation is in agreement with Danielsen et al. (2009), who opined that

perceptions of social support nurture the need for relatedness and provides a structured supportive environment that enables adolescents to evaluate their lives as satisfactory. Further evidence from a qualitative research demonstrated that the presence of quality relationships in the domains of family and friends were important for the experience of life satisfaction (Edwards & Lopez, 2006; Suldo, Frank, Chappel, Albers, & Bateman, 2014).

Adolescents in impoverished contexts have also been found to attribute their judgements of life satisfaction to the presence of a happy family, which comprised both the mother and father (Somrongthong, Sitthi-Aamora, Love, & Loasee, 2008). In the present sample, it is possible that adolescents judged their lives as satisfactory, despite the challenges they had to overcome, because such evaluations were based on the presence of satisfying and supportive relationships. Findings from qualitative interviews established that adolescents expressed satisfaction with life as a result of the kinds of relationships they had with their family members and peers at school. The experience of love and availability of support were associated with positive assessments of their lives.

It is of interest to note that adolescents specifically identified school-related support as an important precursor to life satisfaction. Given that opportunities for advancement and education were rare, it was possible that the presence of support for that paramount area of the adolescents' life enabled them to evaluate their lives as satisfactory. This interpretation is in line with studies that have found that the satisfaction of school-related needs were important for adolescents' experience of life satisfaction (Danielsen et al., 2009; Somrongthong et al., 2008). The current finding revealed that adolescents in the Northern region of Ghana judged their lives as satisfactory when perceived social support was high. Given the presence of financial challenges, the influence of perceived social support on life satisfaction could mean that, even if needs are not adequately met, the evaluation of the availability of support was important for satisfaction with life. Interestingly, some

adolescents were simply satisfied with knowing that some sort of support would be available even if the support did not match their needs. Moreover, research has shown that perceptions of social support was a stronger predictor of psychological outcomes compared to received support (Costello, Pickens, & Fenton, 2001; Haber, Cohen, & Baltes, 2007; Wethington & Kessler, 1986).

The findings of the current study suggest that more efforts are needed to enhance school-related support. Interventions could be geared towards identifying meaningful relationships, and this could be accompanied by strategies to augment and solidify those ties through for example, increased communication. Additionally, teachers could use creative strategies to enable adolescents that seem isolated to become integrated into the school-setting. Social skills training sessions could be used as a platform to inquire from adolescents how supportive relationships could be fostered and their suggestions could form the basis for interventions aimed at increasing perceptions of support.

5.3.2. Perceived social support and psychological well-being mediated by life satisfaction

Given that life satisfaction is one of the indicators of well-being, it was worth investigating whether life satisfaction would mediate the relationship between perceived social support and other psychological well-being outcomes. In line with the hypothesis, a mediated path model in which life satisfaction mediated the relationship between perceived social support and psychological well-being was significant. No notable existing empirical support has been found to reflect a similar mediated relationship between these three variables. However, previous studies have focused on the direct relationship between perceived social support and life satisfaction (Kapıkıran, 2013; Kong & You, 2013), and between perceived social support and other well-being indicators (Rueger et al., 2010; Wang & Eccles, 2012).

The present finding of a significant relationship between perceived social support and psychological well-being, partially mediated by life satisfaction, could be explained by the strong direct relationships between these variables, as discussed in the preceding sections. It could be inferred that the present sample of adolescents' assessment of the adequacy of support influenced their appraisal of life, while the satisfactory evaluation of different life domains, in turn, played an important role in facilitating psychological well-being. A possibility exists that the mediated relationship between perceived social support and psychological well-being was as a result of relational provisions (social support availability; Weiss, 1974) taking on internal significance (personal meaning; Hinds, 1988) such as life satisfaction. Life satisfaction as a form of internal significance could have been characterised by cognitions pertaining to a sense of fulfilment with an individual's current situation. Consequently, life satisfaction might have positively affected the psychological well-being of adolescents. This interpretation is plausible because the satisfactory evaluation of the different domains of the adolescent's life could have been accompanied by positive emotions, which represent a key component of psychological well-being.

The present finding of the mediated relationship between perceived social support and psychological well-being could be explained by the salutogenic (Antonovsky, 1996) and the ecological (Bronfenbrenner, 1994) models. In this sample of Ghanaian adolescents, perceptions of support from both home and school, which were influenced by the social relations in different microsystems, could have had a positive impact on the adolescents' experience of psychological well-being. When adolescents evaluated their support systems as adequate for dealing with life challenges (Antonovsky's concept of "manageability"), this could have enabled them to judge those domains of their lives as satisfactory, and consequently influencing their overall psychological well-being. The partially mediated

model indicated that perceived social support could influence the well-being of adolescents, without the mediation of life satisfaction.

Despite the life situation of the adolescents in the present sample, their well-being seemed to be determined by other factors alongside the presence of material resources. Psychological well-being was found to be dependent on the perceptions of support in their network system and the satisfactory evaluation of life. Perceptions of support increased adolescents' satisfaction with the different domains of their life, which in turn positively impacted their affect, feelings of connectedness with others and overall positive appraisal of life. This finding concurred with positive psychological thinking that emphasises promoting positive experiences in order to enhance overall well-being as opposed to the exclusive focus on the reduction of psychopathological symptoms (Gable & Haidt, 2005).

The present finding has served to highlight the idea that promoting psychological well-being among impoverished adolescents is not limited to the provision of resources. Therefore, MHP programmes among school-going adolescents need to take into account possible pathways for promoting well-being. These programmes could be targeted at equipping adolescents with skills to form instrumental relationship with individuals who will assist with their needs, thereby fostering positive appraisals of important domains of their lives and increasing their personal well-being. Mental health promotion programmes could also employ psycho-educational techniques to teach social competence, given that there is evidence of its positive impact on perceptions of support (see also Brand et al., 1995). Social competence training could include practical communication skills, methods of enacting friendships and lessons on the need to exhibit considerate behaviours among an individual's peers.

5.3.3. Perceived social support and hope

Consistent with the hypothesis, a significant positive relationship was found between perceived social support and hope. In line with the present finding, research evidence has demonstrated that hope is an important correlate of perceived social support (Cheng et al., 2014; Esteves et al., 2013; Gilman & Huebner, 2006; Hagen et al., 2005; Van Ryzin, 2011; Yarcheski et al., 2001). In addition, perceived social support has been extensively studied as a coping resource for well-being (e.g., Harrison et al., 2010; Helsen et al., 2000; Malecki & Demaray, 2003; Yarcheski et al., 2001). There has also been extant research on hope as a positive psychological construct (Marques et al., 2011; Snyder, 2000, 2002). Both of these constructs have been highlighted as important determinants of adolescents' well-being and are necessary for experiencing flourishing mental health (Keyes, 2005, 2007; Ryff & Singer, 1998).

It is possible that the perceived presence of supportive relationships from significant others in their networks, had served to instil hopeful thinking about many aspects of life for this sample of school-going Ghanaian adolescents. This interpretation appears to be in line with Dufault and Martocchio's (1985) explanation of hope, wherein the presence of attachment, social interaction, encouragement, affirmation and intimacy were necessary for the development of hopeful thinking. Accordingly, the presence of effective social interaction and willingness on the part of significant others to help, could have strengthened the Ghanaian adolescents' action to achieve hope. The influential role of perceived social support as a source of hope was also recounted by adolescents in the follow-up qualitative interview. Informational support from parents and instrumental and informational support from teachers were identified as pertinent for engendering hope. Adolescents intimated that the advice of their parents and encouragement from teachers motivated them, and granted them a desire to look forward to the future. Additionally, previous failure and frustration of goals in the family

was also used to encourage adolescents to harness the necessary pathways in the achievement of their goals.

In relation to the role of family support, Kemer and Atik (2012) asserted that emotional and instrumental support from the family was salient for the development of hope among adolescents. Similarly, Theron and Engelbrecht (2012), using the ecological approach, found that non-white South African youths navigated through various challenges and experienced hope as a result of the presence of caring teachers that acted as sources of hope. Additionally, the presence of significant others as sources of hope has been confirmed in a number of other scholarly work in the African region (Appelt, 2006; Ahmed, Seedat, Niekerk, & Bulbulia, 2004; Asamoah et al., 2014; Baird & Boyle, 2012). These authors explained that the joint experience of stressors within collective communities resulted in individuals drawing a sense of hope from others in the community.

The perceived presence of support from family and the community as sources of hope is consistent with the ecological theory. This is because the development of hope among adolescents could have been influenced by agents in the microsystems and mesosystems in which the adolescent find themselves (Bronfenbrenner, 1994; McLaren & Hawe, 2005). These agents included parents from the microsystem of the family and teachers from the microsystem of the school, who could have provided motivation and encouragement for adolescents in the present study.

Studies investigating the relationship between perceived social support and hope have considered social support as a coincidental variable. For example, Esteves et al. (2013), in their review, noted that hope was a robust variable related to social support among adolescents. Likewise, Van Ryzin (2011) also noted that the perception of peer and teacher support within the school environment was important for hope among a sample of adolescents in the USA. In line with the interpretation of social support as a source of hope,

Van Ryzin (2011) opined that the perceptions of the availability of support served as a protective factor that aided in the development of hope. This would mean that adolescents in the present sample felt hopeful, despite the challenges they encountered, due to the perceptions of the availability of support that protected them against the negative effects of their current life situation.

Another plausible explanation for the present finding (of a positive relationship between perceived social support and hope) is that during the goal-pursuit process, adolescents could have depended on their support systems as pathways for achieving their goals. Relating to this, Snyder (2002) has argued that an environment without support could be detrimental for the development of hope, in as much as a high level of hope was likely to be fostered by an environment in which the individual perceived the presence of adequate social support. The notion of perceived social support as a pathway for the attainment of goals is also in line with Antonovsky's (1987, 1996) concept of SOC. Antonovsky (1996) noted that the responsibility of developing a sense of coherence does not lie with the individual alone, but is dependent on the individual's involvement in meaningful relationships and valued decision-making in the community. In a similar vein, the development of hope as a form of orientation towards life, in the present sample, was possibly facilitated by the perception of the presence of meaningful relationships from which Ghanaian school-going adolescents could enlist assistance in times of need.

The present finding has implications for MHP programmes. Interventions aimed at building hope among adolescents in the Northern region of Ghana could take into account the importance of social support from family, peers and teachers. As mentioned earlier, for the family, mental health practitioners could engage in parent-adolescent counselling sessions targeted at improving social support (Rigby, 2000; Yarcheski et al., 2001). In a similar vein, teachers could be encouraged to provide the needed psychosocial support and motivation

since adolescents are at a stage in their life where they are trying to harness the necessary skills for work and family assignments (see also Crockett & Crouter, 2014). These skills are crucial for the goals adolescents want to achieve in life. Psychosocial support from teachers could include enabling adolescents identify their areas of strengths and assisting them to develop appropriate goals and pathways in these areas. It is worth reiterating that, due to the absence of school psychologists in the present context of the Northern region of Ghana, there is also a general need for mental health professionals to train and equip teachers with basic skills for psychosocial interventions such as social skills training and the building of hope.

5.3.4. Perceived social support and life satisfaction mediated by hope

The present finding provided support for the hypothesis indicating a significant positive relationship between perceived social support and life satisfaction, mediated by hope. No notable previous findings have been found to reflect a similar relationship between these three variables. However, empirical evidence exists in literature that points to the direct relationship between perceived social support and life satisfaction (Danielsen et al., 2009), and between hope and life satisfaction (Marques et al., 2013). There is also literature evidence pointing to the relationship between perceived social support and hope, with these variables interactively influencing life satisfaction (Lu & Hsu, 2013; Yarcheski et al., 2001).

The mediated relationship between perceived social support and life satisfaction, in the present sample, could have resulted from the interactive effect of personal and situational factors. With hope as a personal factor and social support presenting itself as a situational factor, the interaction of the feelings of agency, with the perceptions of adequate support, could have provided the platform for adolescents to judge their lives as satisfactory. Furthermore, the observed relationship could have been due to social support providing the necessary pathway for the successful achievement of goals, which in turn influenced the adolescents' sense of satisfaction with life. It would seem that adolescents' perceptions of

support enabled them to manage the anxieties of the future. This in turn allowed them to evaluate the challenges associated with different domains of their life as manageable, consequently promoting a sense of satisfaction with life. This interpretation is consistent with Snyder's (2002) postulation that hope is likely to develop in a social environment in which children are given adequate care and support. Based on this line of reasoning, there is research evidence demonstrating that Croatian children who had high levels of hope, were more likely to be highly satisfied with life and at the same time have greater social support levels, compared to those with low levels of hope (Merkaš & Brajša-Žganec, 2011). The present finding of a mediated relationship between perceived social support and life satisfaction, via hope, was congruent with research indicating that perceived social support and hope jointly predicted subjective well-being among individuals with an athletic injury (Lu & Hsu, 2013). Hope and perceptions of support interactively influenced their rehabilitation behaviour and subjective well-being.

Another plausible explanation for the mediated relationship between perceived social support and life satisfaction via hope is that, in line with Hinds's (1988) theorising, the presence of interactive and supportive environments enabled hope to take on a greater internal significance. This internal significance of the existence of a personal and positive future, in turn, could have contributed to the experience of life satisfaction (Yarcheski et al., 2001). This inference is in line with Muysken's (1979) long-held proposition that what individuals hope for is constructively tied to their well-being. In the current sample of Ghanaian school-going adolescents, the evaluation of life as satisfactory could have been influenced by the relational provisions (available social support; Weiss, 1974), which provided adolescents with a sense of hope for things that were pertinent to their well-being. Viewed from this vintage point, this sense of hope could have eventually increased the positive evaluation of different domains of their lives.

It is also noteworthy that the mediated relationship between perceived social support and life satisfaction via hope, could be explained using the individuals' family origin. Jiang et al. (2013) argued that hopeful thinking was developed from the adolescents' family origins and then reinforced through learning experiences. These authors noted that adolescents internalised the consequences of interactions with parents and significant others, and this enabled them to set their goals and establish pathways for achieving them. Jiang and associates also asserted that hopeful thinking that was developed as a result of interactions with an individuals' network, had the potential of also influencing the cognitive evaluation of the adolescents' lives. Although this framework was used to explain the link between parental attachment and life satisfaction via hope, similar inferences could be made concerning perceived social support. Adolescents' perceptions of support could have been formed through the internalisation of the consequences of their interactions with parents and significant others. These interactions could have been necessary for the development of pathway thought which iteratively affected agency and the overall goal-pursuit process. The success of the goal-pursuit process, in turn, might have affected adolescents' respective experience of life satisfaction.

Some authors have postulated that perceived social support, and in some cases school connectedness, mediated the relationship between hope and life satisfaction (Ng et al., 2014; Sukkyung et al., 2008). The rationale behind this theorising was that hope was not developed in a vacuum, but rather formed in a web of relationships and interactions in the environment. This explanation resonates with the hypothesis that was confirmed in the current study. Further research is nonetheless needed to establish conclusive evidence on which of the variables (perceived social support and hope) should be the antecedent and the other the mediator. However, the findings of the current study have contributed towards providing research evidence on the importance of hope and perceived social support for life satisfaction.

The present finding also provides further support for the ecological model of human development. This is because the perceptions of support might have been derived from the social interaction in two microsystems (home and school), which, in turn, facilitated hopeful thinking and consequently life satisfaction.

The implication of the present finding is that adolescents in the Northern region of Ghana require interventions that do not only foster psychological strengths, but also improve on existing external resources such as the availability of support. As already indicated, such interventions could be directed at encouraging both parents and teachers to be supportive of adolescents' goals and aspirations. Pertaining to internal resources or psychological strengths, MHP interventions could also begin from assessing levels of hopefulness. During this intervention, adolescents with low levels of hope could be assisted by creating a supportive environment that could strengthen pathway thinking aspect of hope.

5.4. Life Satisfaction and Psychological Well-being

Consistent with the hypothesis, there was a significant positive relationship between life satisfaction and psychological well-being. In line with the present finding, life satisfaction has been found to be related to other well-being indicators. For example, research has revealed that life satisfaction was related to hope (Gilman et al., 2006; Valle et al., 2006), lower levels of stress and internalising and externalising behaviours (Bendayan et al., 2013; Suldo & Huebner, 2004), self-esteem (Kong & You, 2013), positive affect (Cohn et al., 2009; Gruber et al., 2013; Headey, Kelley, & Wearing, 1993; Ryff, 1989), engagement (Góngora & Solano, 2014) and positive functioning (Keyes, 2010; Ryff & Keyes, 1995; Tolan & Larsen, 2014). Life satisfaction has also been identified as a key indicator of well-being (Diener, 2009; Diener & Chan, 2011; Diener et al., 1999). However, there have been no notable studies that explored the relationship between life satisfaction and psychological well-being as it was measured in the present study.

Given that life satisfaction has been identified as a key indicator of well-being, it was unsurprising that life satisfaction was significantly related to psychological well-being, measured as a latent variable comprising positive affect, emotional ties and life satisfaction. A possibility exists that satisfaction with life, which is the cognitive component of subjective well-being (SWB) was accompanied by positive affect, the emotional component of SWB. This interpretation appears to be in line with the proposition by Huppert and So (2013), who asserted that indicators of well-being tend to be related to one another. Furthermore, adolescents in the present sample reported to be experiencing psychological well-being, probably because they had a positive appraisal of the different domains of their lives, which included family, friends, living environment and the self. For example, data emerging from the qualitative interviews showed that adolescents evaluated their lives as satisfactory, when they considered the fact that they had parents who were concerned about their education.

Similarly, adolescents reported that the satisfaction with their current academic performance, which falls under the school domain was necessary for the global evaluation of their lives as satisfactory. In line with this interpretation, Pavot and Diener (2008) in their review of SWB research noted that domain satisfaction was predictive of overall life satisfaction with life, which is a component of psychological well-being. They also stated that the additive effect of satisfaction in different domains could influence the changes in global life satisfaction. In addition, domain-specific satisfaction has also been found to result in stronger emotional ties (Diener & Seligman, 2002), providing further support for the relationship between life satisfaction and psychological well-being.

Another plausible explanation for the relationship between life satisfaction and psychological well-being is that life satisfaction could have presented itself as an antecedent of other well-being indicators (comprising positive affect, emotional ties and life satisfaction). Related to this, Gilman and Huebner (2006) have argued that it was not

sufficient to investigate the antecedents or correlates of life satisfaction, but some attention ought to be given to understanding the consequences of life satisfaction. In light of this recommendation, the current study demonstrated some of the possible consequences of life satisfaction. These consequences included positive feeling and functioning, which are aspects of flourishing mental health as described by Keyes (2003). In the present study, life satisfaction emerged not only as a good mediating variable or outcome variable, but also a possible antecedent variable for other indicators of psychological well-being among adolescents in the Northern region of Ghana. This finding was important for the positive psychological paradigm because it provided additional knowledge on the benefits and consequences of adolescents experiencing life satisfaction.

Life satisfaction as an antecedent of other well-being indicators appears to have been supported by the theory of salutogenesis (Antonovsky, 1987, 1996). Life satisfaction could be considered as a form of positive orientation and evaluation, which shares some similarity with the SOC construct in salutogenic framework. The sense of coherence has been described as an individual's orientation towards life and often identified as an important predictor of affect and functioning (Brassai et al., 2011; Öztekin & Tezer, 2009). According to Antonovsky (1987, 1996), an individual's orientation towards life is essential because it enables him or her to assess his or her life situation accurately, thus increasing the likelihood of well-being. Similar inferences could be made for the link between life satisfaction and psychological well-being. Accordingly, the positive orientation towards the adolescents' current life situation (in different domains) as structured and explicable could have produced positive emotions and feelings of integration within the Ghanaian adolescents' networks.

It was also worth noting that adolescents' descriptions of their experiences of life satisfaction (which included fulfilment of needs and approval from peers) were slightly different from the observed statistical relationships. In line with cross-cultural studies (Kang

et al., 2003; Schimmack et al., 2002), life satisfaction among the present sample of school-going adolescents within the Northern region of Ghana, seemed to be related to the need for interdependence rather than autonomy. Interdependence was demonstrated by adolescents who reported that having their needs met by family members was necessary for the experience of satisfaction with life. It is possible that the feelings of neglect that adolescents experienced, especially with regards to the supply of their social and financial needs, might have resulted in participants recounting that the adequate provision of needs was necessary for life satisfaction. The importance of having material resources in order to experience life satisfaction was confirmed in a previous study with children across eight countries (Sarriera et al., 2015). These authors found that children from Algeria, South Africa and Uganda needed access to material resources in order to evaluate their lives as satisfactory. Given the central role of social context, it was unsurprising that the availability of material resources was central in the determination of life satisfaction in school-going adolescents in the Northern region of Ghana. It is also possible that the feelings of neglect that adolescents might have experienced, especially pertaining to the lack of availability of their social and financial needs, might have resulted in participants recounting that the adequate provision of needs was necessary for life satisfaction. This could mean that determination of life satisfaction was dependent on the adolescents' evaluation of the extent to which significant others in their lives fulfilled their primary role as care-givers.

Furthermore, the need to maintain positive relations with members of one's in-group by seeking peer admiration and approval could also be regarded as a display of interdependence. The present study did not find support for the assertion of Schwarz and colleagues (2012), who highlighted a need for parental admiration rather than peer acceptance for adolescent life satisfaction. However, Helseth and Misvaer (2010) determined that a positive self-image and "having friends" were crucial for the experience of life

satisfaction among a self-selected group of Norwegian adolescents. It appeared that the impressions peers had of them, with specific reference to the fear of negative evaluation, had been instrumental in galvanising these adolescents to form positive relations with their peers. Moreover, positive external impressions depicted acceptance from the adolescents' peers, which in turn seemed to foster positive relations and interactions between adolescents and their peers. These relations could have been crucial for adolescents to receive instrumental support including the provision of food (particularly as a result of their impoverished backgrounds) and assistance with school projects. Relatedly, Suh et al. (1998) opined that normative desirability was salient for the experience of life satisfaction in collectivist cultures. This could mean that adolescents' experience of life satisfaction was associated with fulfilling the norms desired by their peers and other socio-culturally defined expectations in order to maintain positive relations with them. Further research is needed to fully understand the spectrum of factors that comprise an individual's life satisfaction. Although family values are of importance in the Northern region of Ghana, peer acceptance and the maintenance of positive relations with peers emerged as crucial for life satisfaction, with no mention of parental admiration.

The need for the gratification of needs and maintenance of positive peer relations demonstrates the value of proximal processes (Bronfenbrenner, 1994) for adolescents' development trajectory. Proximal processes were evident in adolescents' reports of dependency on their parents and significant others (in the microsystem) for the provision of their needs in order to experience life satisfaction. In a similar vein, maintaining positive relations and peer admiration, which was determined by how adolescents were perceived by their peers also reflected proximal processes taking place in the microsystems and these were also necessary for engendering life satisfaction.

It is important to note that although life satisfaction has been identified as a key indicator of well-being, there is still a lack of consensus on all the other possible measurements of psychological well-being. Ryff and Keyes (1995) argued that it was important to understand the structure of psychological well-being. They identified six domains including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. Related to this, some researchers have focussed on the VIA-IS classification of psychological strengths (Park & Peterson, 2006; Peterson, 2006; Peterson, Ruch, Beermann, Park, & Seligman, 2007; Proctor et al., 2011; Toner, Haslam, Robinson, & Williams, 2012) and its relation to well-being and life satisfaction domains. Seligman (2011) also proposed the PERMA model, which includes positive emotions, engagement, relationships, meaning and accomplishment. This lack of consensus influenced the choice of a scale to measure psychological well-being, which does not encapsulate all the indicators identified by previous researchers. The lack of consensus also necessitates further research on the structure psychological well-being and how its indicators are related, especially in the Ghanaian context where such research is almost non-existent. It must also be mentioned that further research is needed in order to establish conclusive evidence on what components of psychological well-being could be predicted by life satisfaction.

A salient implication of the present finding is that efforts geared towards improving adolescents' domain-specific judgements of life satisfaction would, in turn, influence affect, emotional ties and the overall assessment of life. As a result, there is a need for school MHP programmes that aim to increase adolescents' life satisfaction. These programmes could begin by assessing the domains of the adolescents' life that are pertinent to the overall evaluation of their lives as satisfactory. Additionally, there is a need for governmental

agencies and non-governmental organisations (NGOs) to harness more efforts at providing adolescents with their basic needs, which represents a crucial source of satisfaction.

5.5. Life Satisfaction and Psychological Distress

Although the hypothesised relationship between life satisfaction and psychological distress was not confirmed in the structural model, the pattern of bivariate correlations provided preliminary support for this hypothesised relationship. It was found that all the subscales of life satisfaction was significantly negatively correlated with loss of behavioural and emotional control indicator of psychological distress. This finding is in line with previous research indicating that life satisfaction was able to predict internalising and externalising behaviours among adolescents in the USA (Gilman & Huebner, 2006; Suldo & Huebner, 2004).

The observed bivariate correlation in the present sample of adolescents could have been due to positive appraisal styles protecting adolescents from adverse social conditions, which could have consequently resulted in negative behavioural reactions. In line with this interpretation, Lazarus (1991) opined that meanings that are derived from positive appraisals are instrumental in protecting individuals from negative emotional states and in turn promoting positive affect. The lack of relationship between the two latent variables- life satisfaction and psychological distress, however, necessitates further research on the hypothesised model of mental health.

5.6. Gender Differences in the Hypothesised Model

One of the aims of the present study was to explore possible gender differences in the relationships found in the hypothesised model. The hypothesised model comprised relationships between hope, perceived social support, life satisfaction, psychological well-being and psychological distress. As already mentioned, the hypothesised model was found to

have an adequate fit when compared across gender. The gender differences in the hypothesised relationships among the variables will be discussed in this section.

Firstly, the direct relationship between hope and life satisfaction was only approaching significance for males, while this relationship was significant for females. This implied that female adolescents in the Northern region were more likely to experience life satisfaction when they felt hopeful. There have been inconsistent findings on the relationship between gender and hope (Esteves et al., 2013) with some studies indicating that these two variables are related (Hendricks-Ferguson, 2006; Hinds et al., 2000; Venning, Elliott, Kettler, & Wilson, 2009), while others point to no relationship between them (Day & Padilla-Walker, 2009; Ritchie, 2001; Vacek et al., 2010). For example, Venning et al. (2009) found that boys were more hopeful than girls. Moreover, life satisfaction has been found not to differ across gender in some studies (Fiori et al., 2009; Gilman & Huebner, 2006). Other studies have found that males experienced higher levels of general life satisfaction compared to females, and gender was found to mediate the relationship between self-esteem and life satisfaction (Zhang & Leung, 2002).

Hope was found to be a good predictor of life satisfaction probably because females from the Northern part of Ghana, as portrayed in the qualitative interviews, are generally at a more disadvantaged position regarding opportunities for advancement. It is possible that this sample of female school-going adolescents were more hopeful about their future because of the pathway to advancement that education provided for them. Such hopeful thoughts might have, in turn, influenced their judgements of life satisfaction. This interpretation is partly supported by a study in Northern Ghana and India indicating that education fostered a sense of agency among Ghanaian females (Arnot, Jeffery, Casely-Hayford, & Noronha, 2012). Additionally, the present finding is consistent with scholarly work in South Africa that has

revealed that white females have higher levels of gratitude, hope and life satisfaction compared to white males (Jackson, van de Vijver, & Fouché, 2014).

However, the present finding did not give empirical support to the notion of there being no gender differences in the relationship between well-being indicators such as hope, life satisfaction and self-esteem as depicted in previous studies (Demirli, Turkmen, & Arik, 2015; Song, Kong, & Jin, 2013; Vera et al., 2011). Further research that is aimed at exploring the mediating role of gender in the relationship between hope and life satisfaction is needed since most of the studies cited have provided inconclusive evidence on the relationship.

Secondly, life satisfaction was found to have a significant relationship with psychological well-being among males, but this relationship was only approaching significance for females. This implied that life satisfaction among adolescent males in the Northern region was an important antecedent of other well-being indicators. A plausible explanation for the observed gender differences could be that the present sample of male adolescents' judgements of satisfaction with life impacted well-being, because of their current privileged status in different domains of life. This interpretation is in line with the assertion of Calys-Tagoe et al. (2014), who noted that older Ghanaian men experienced higher levels of subjective well-being because of their access to better educational opportunities and higher income. It has also been suggested by Arnot et al. (2012) that although females benefited from education, males were still at a more advantageous position with respect to authority and empowerment. Additionally, Sipsma et al. (2013) also opined that Ghanaian women were at a more disempowered position as compared to their male counterpart and this had implications for their well-being. This position of privilege might have resulted in satisfactory judgements of life that subsequently influenced the well-being of male adolescents.

The present finding is not in line with the study by Mosknes and Espnes (2013) who noted that, the strength of the association between self-esteem and life satisfaction did not differ across gender among a sample of Norwegian adolescents. Although, Mosknes and Espnes's (2013) study introduces a different indicator of well-being, their study showed no gender differences in the relationship between life satisfaction, self-esteem and subjective health. Given the paucity of research on the relationship between life satisfaction and psychological well-being across gender, there is a need for further research on the possible gender differences.

Thirdly, the relationship between life satisfaction and psychological distress was found to be approaching significance for males, but not significant for females. Although this relationship was not significant, the fact that it approached significance for males was worth mentioning. This is because there was no significant relationship between life satisfaction and psychological distress before the comparison across gender. This finding implied that levels of life satisfaction might be inversely related to the experience of psychological distress, with gender moderating this relationship. Moreover, results of the bivariate correlations showed that the different domains of life satisfaction were related to loss of behavioural and emotional control, which was an indicator of psychological distress.

There is research evidence to show that life satisfaction is a good predictor of psychological distress (Gilman & Huebner, 2006). However, there have been few studies showing the relationship between these constructs by gender. For example, Hagerdoorn, Buunk, Kuijer, Wobbles, and Sanderman (2000) found no gender differences in the relationship between psychological distress and quality of life among the healthy controls of a group of Dutch cancer patients and their partners. In a different study, among Chinese adults, it was also found that there were no gender differences in the direct paths demonstrating the relationship between mindfulness, life satisfaction and mental distress

(Wang & Kong, 2013). However, the minimal evidence on the impact of gender on the relationship between life satisfaction and psychological distress necessitates further research in this area.

Gender differences were also found in the hypothesised mediated relationships among the variables. In line with the hypothesis, the relationship between perceived social support and psychological well-being, partially mediated by life satisfaction, was found to be significant for males, but not for females. Given that the direct relationship between perceived social support and psychological well-being was not significant for males, it would mean that life satisfaction fully mediated this relationship for males. For females neither a fully or a partially mediated relationship was significant. There were no notable studies showing a similar relationship. However, previous research among Spanish adults who had a cardiac coronary event indicated that gender had a significant effect on the relationship between perceived social support, life satisfaction, depression and anxiety (Pérez-García, Ruiz, Sanjuán, & Rueda, 2011). These authors found that for both men and women, perceived social support was found to predict life satisfaction, however, social support influenced anxiety and depression only among men. Although, Pérez-García and colleagues study provide plausible evidence for the presence of gender differences, it fails to explain the mediational role of life satisfaction in the hypothesised relationship.

The fully mediated pathway from perceived social support to psychological well-being through life satisfaction seemed to indicate that domain-specific satisfaction emerging from adequate support was necessary for psychological well-being among adolescent boys alone. This result is in agreement with scholarly work on child well-being from the Northern region of Ghana, which has indicated that adolescent boys tend to receive greater school-related support compared to girls (Buchanan, 2014). This greater level of support might have, in turn, increased school or family satisfaction and, consequently, their psychological well-

being to the detriment of their female counterparts. Apart from the absence of adequate school-related support for females, most of these girls had to deal with the burden of gender-specific home chores that prevented them from enjoying the full benefits of formal education (Buchanan, 2014). Moreover, as a result of the absence of school-related support, girls were more likely to migrate to the south under harsh conditions to seek extra income for their education, and this exposes them to rape, teenage pregnancy and school drop-outs (Owusu, 2013). These behaviours that were due to the lack of school-related support had the probable likelihood of reducing their satisfaction with life and overall psychological well-being, thereby explaining the observed gender difference.

Another difference that was observed was the mediated relationship between perceived social support and life satisfaction via hope, which was significant for females only. The observed gender differences in the hypothesised mediated relationship could have been due to the fact that females in comparison to males invested more in emotions (Gilligan, 1982) in the development of pathway thinking. To this effect, the strong perceptions of support impacted life satisfaction probably because the present sample of female adolescents were able to find appropriate pathways in the opportunities that education offered them, given their general disadvantaged position (Arnot et al., 2012; Buchanan, 2014; Fentiman et al., 1999). As already indicated, although received support might have been low compared to males, the perception of the availability of some kind of support might have been instrumental in engendering life satisfaction via hope-pathway. Moreover, findings from the qualitative interviews revealed that females were satisfied with life because their parents supported their education. Such support was identified as a necessary pathway for fostering a successful future.

Comparing the two mediated relationships, perceived social support and psychological well-being via life satisfaction for males, and perceived social support and life

satisfaction via hope for females, it would seem that among females life satisfaction was dependent on hopeful thoughts and not perceived social support alone. Moreover, as result of the disproportionate opportunities for advancement, domain-specific life satisfaction seemed to be largely determined by the presence of pathway and agency thinking. Whereas among males, perceived presence of support was adequate in predicting domain-specific satisfaction, without the mediation of possible pathways, probably because of the current position of advantage in important life domains such as education. These identified gender differences illustrate the crucial role of culture in well-being research, especially pertaining to the extent to which elements of the macrosystem such as overarching patterns of behaviour influence the experiences and opportunities that adolescents are exposed to. This could imply that, apart from interactions between smaller units of the ecological systems and the presence of individual strengths, there is a need to consider how prevailing cultural practices could influence the extent to which psychological strengths could have the desired impact on psychological well-being. However, due to the limited research evidence, these suggested explanations require further empirical validation from research in the Northern region.

As mentioned previously, further research is needed into the role of gender in the relationships among these variables. The findings on gender differences have implications for interventions. School MHP programmes must take into consideration the indicators that are pertinent for well-being among males and those that are central for females, given some of the differences that were highlighted. Additionally, these programmes must consider the social context of gender relations in the Northern region and how these might affect the mental health of adolescents. For example, the general lack of school-related support and the position of disempowerment among females must be critically addressed in order for MHP interventions to have any meaningful impact.

5.7. Resources for Coping and Well-being

The present study also sought to investigate the other resources that Ghanaian school-going adolescents harnessed to manage the stressors they encountered regularly. During the follow-up interviews with selected participants, adolescents intimated that networking, economic engagement and assistance from non-governmental organisations were the important resources that enabled coping. In order to have a better understanding of how adolescents utilised these resources, it was necessary to briefly discuss a crucial challenge for most adolescents, which was poverty. Poverty was a pervasive stressor that was identified by all the adolescents who participated in the qualitative interviews. None of the adolescents reported that they considered themselves as having parents that were financially capable. Moreover, there were instances where the family as a source of nurturance was questioned as a result of the neglect adolescents experienced when it came to the provision of their basic social and financial needs. This neglect reflected the pervasive influence of poverty in the daily lives of the participants.

The present finding was in line with previous research in the Northern region of Ghana, which has been generally described as one of the poorest regions in the country (Awumbila & Ardayfio-Schandorf, 2008; Awumbila et al., 2011; Black & Sward, 2009; Bull et al., 2010). The socio-economic position of the region has been described as having being influenced by historical colonial policies, which made the Northern region a labour reserve for the South (Mensa-Bonsu, 2003). This trend is still slightly apparent given the constant migration of men and women from this region to the Southern regions of Ghana, to engage in small-scale businesses such as head portering (Awumbila & Ardayfio-Schandorf, 2008; Wilson & Mittelmark, 2013). This economic activity in the Southern region is characterised by a number of physical and social hazards, which include the lack of shelter, the threat of physical harm, and the risk of sexual abuse.

Against the background of extreme poverty in the family, the present sample of school-going adolescents in the Northern region of Ghana reported that they were forced to find practical ways of surviving and providing for their daily needs. One of the strategies reported to be adopted was forming social ties that had instrumental and practical benefits. Adolescents utilised their network system by investing personal efforts in economic opportunities that these network systems offered. This network system occasionally included a family member who offered some income to the adolescent to assist with small-scale businesses. Others included friends who taught adolescents relevant vocational skills which were used to secure an extra income. The present findings concur with research on the importance of received support for coping (Haber et al., 2007) and for satisfying the needs of the individual. This finding also reflected Snyder's (2002) proposition of refining pathways and creating alternative courses of action. Accordingly, adolescents created alternative pathways when their parents were unable to cater for their school-related needs. These pathways included the forming of social ties that had instrumental benefits.

The present finding was also partly consistent with Thoits's (2011) view that received instrumental support from significant others in the support networks, especially outside family, was useful for both physical and mental health. The current finding (on the importance of social ties) was also in line with Lakey and Orehek's (2010) relational regulation theory. According to the theory, social support positively influenced well-being, especially when support was able to positively regulate the recipient's moods and dispositions. This implies that adolescents, in the present sample, could have utilised the instrumental support they received through their interaction with significant others to satisfy their needs, which in turn regulated their moods and dispositions positively in the direction of well-being.

The utilisation of the adolescents' network system concurs with Antonovsky's (1987) proposition of generalised resistant resources (GRRs). These GRRs could have enabled adolescents to view their world as manageable, notwithstanding the socio-economic challenges they faced, thereby reinforcing their sense of coherence and, consequently, improving their well-being. Antonovsky (1996) noted that GRRs were necessary for the successful development of SOC, which in turn produced ease at the health end of the continuum. The presence of GRRs could have also prevented the present sample of Ghanaian adolescents from experiencing an overload, if they believed that they had the necessary resources to combat the stressors that they encountered. Furthermore, adolescents could have capitalised on the resources available in their network system to combat stressors of poverty and educational challenges. The resultant effect of such activity was an experience of ease in those areas of the adolescent's life.

In the present sample, personal effort was identified as important during the support-seeking process. This finding reiterates Thoits's (2011) argument that social support was ineffective if it reduced the individual's feeling of competence. It is therefore possible that support positively impacted on the adolescents' well-being, because the support received could have required some personal effort in order to have beneficial outcomes. Additional findings from the qualitative data revealed that adolescents were concerned about their self-worth when seeking for help from their peers. Moreover, cross-cultural research has shown that a sense of independence, competence and self-esteem is important during the support seeking process, albeit in individualistic cultures (Chen et al., 2012; Kim et al., 2008).

In the interviews with selected participants, NGOs were also identified as providers of resources for coping and well-being among adolescents in the Northern region of Ghana. Bull et al. (2010) noted that a number of NGOs were instrumental in providing a source of livelihood for people in the Northern region. Additionally, research with mentally-ill patients

has demonstrated that NGOs were influential in assisting with the rehabilitation of these patients, while endeavouring to restore them back to the community (Cohen et al., 2012). The current study adds to the literature by providing evidence on the importance NGOs for fostering the well-being of school-going adolescents in the Northern region. Non-governmental organisations provided tuition fees for outstanding learners at almost all levels of education. A number of these NGOs such as campaign for female education (CAMFED) were also concerned with promoting girl-child education in the country.

Regarding implications, more NGOs could be encouraged to assist with education in the Northern region. The current educational policy being utilised in the Northern region could be reformed to include the provision daily feeding and other basic resources necessary for the adolescent well-being. Macro policies that are targeted at increasing educational opportunities and resources are needed. Additionally, interventions could also be targeted at fostering social competence among adolescents during the support-seeking process. Building social competence is necessary since adolescents are at a stage where they are taking up new roles and building a “sense of self-worth” surrounded by a wave of social and psychological changes.

5.8. Summary of Findings

The findings of the current study has revealed that hope, perceived social support and life satisfaction were imperative for promoting psychological well-being in the Northern region of Ghana. Life satisfaction also emerged as an important mediator between the other two variables and psychological well-being.

Furthermore, gender differences were found in the relationship among the latent variables. Notable was the relationship between life satisfaction and psychological well-being, which was significant for males only. Additionally, the relationship between hope and life satisfaction was significant only among females in the present sample. The mediated

relationship perceived social support and psychological well-being via life satisfaction was found to be significant for only males, while the mediated relationship between perceived social support and life satisfaction via hope was significant only among females. These gender differences among the variables represents an important finding in positive psychology research since previous studies have explored these constructs individually and not in relation to other variables.

Qualitative findings from the current study illustrated that, although, research on these constructs seemed to be centred in the West, they are also applicable within the Ghanaian context. Contextual data that emerged included crucial role of religion and significant others for engendering hope among adolescents. Social support although previously identified as central in collectivist communities such as Ghana (Gyekye, 1997) seemed to be limited in providing for adolescents' need in some instances. Some adolescents felt that the expanded family system did not seem as functional as expected. As a result, there was a rather heavy reliance on support from peers at school. The closely knit family systems seemed to be changing in the face of urbanisation and immense socio-economic challenges. Despite this, there were also positive experiences of support, which included the perceptions of the availability of emotional, instrumental and informational support from family, friends and teachers, respectively.

Adolescents in the present sample were also forced to engage in small-scale businesses and other vocational jobs in order to augment their income since parents could not adequately meet their financial needs. Moreover, peers at school were frequently asked to assist with providing for the adolescent's basic needs. Non-governmental organisations were also reported to be instrumental in assisting with the educational needs of some adolescents in the Northern region of Ghana. However, these NGOs were still limited with regards to the

number of adolescents they could make provision for at the same time. In light of this, governmental assistance for education is highly required in the Northern region.

Furthermore, although adolescents in the Northern region were frustrated with their current life situation, they still had some positive experiences from which they could draw some strength. These included the satisfactory evaluation of their life due to hopeful thinking and the presence of fulfilling social relations with friends and family.

Another salient finding in the present study was the insignificant direct relationship between hope and psychological well-being. This finding questions the validity of research that surmises that hope would be invariably related to psychological well-being (Valle et al., 2006). It would seem that positive experiences (for example, life satisfaction) must mediate this relationship in order for psychological well-being to be enhanced. This finding has implications for the theoretical understanding of the relationship between the indicators of well-being.

Chapter 6: Conclusion

6.1. Contributions of the Present Study

The well-being of adolescents has become a concern for researchers in the social sciences especially psychology. A recurring question that researchers are seeking to answer pertains to understanding the positive experiences that are necessary to ensure optimal mental health. Moreover, there is a general consensus that the reduction of negative symptoms is not an adequate avenue for ensuring the psychological well-being of adolescents (Gable & Haidt, 2005; Kobau et al., 2011; Seligman & Csikszentmihalyi, 2000). Positive psychologists have championed this shift from an excessive focus on psychopathology to a renewed interest in psychological strengths. Current conceptualisations of mental health in the Western scholarly thinking are now focussed on increased positive functioning alongside the reduction of negative symptoms (Gable & Haidt, 2005). However, research in Africa and specifically Ghana seems to be lagging behind in the shift to understanding the psychological strengths that are essential for adolescent psychological well-being. Having this in mind, the present study tested a structural model comprising hope, perceived social support, life satisfaction and mental health, in order to demonstrate the pathways to psychological well-being and psychological distress. Seven major contributions of the present study are outlined below.

Firstly, the current study is the only study (to my knowledge) that has applied the positive psychological paradigm in understanding aspects of mental health among adolescents in the Northern region of Ghana. Previous research has focussed on mental illness, its cure, and prevention. The present study has demonstrated the structural paths from different positive psychological constructs (hope, perceived social support and life satisfaction) to psychological well-being. Other indirect relationships between these constructs and psychological well-being were also demonstrated. The present findings illustrated that in order to promote mental health among adolescents in impoverished

communities such as those found in the Northern region of Ghana, some attention must be given to their positive experiences and not just the reduction of negative symptoms. The findings of the current study also revealed that although the reduction of stressful conditions would be useful, the enhancement of positive experiences such as hope, perceived social support and life satisfaction were necessary in the promotion of mental health. An important implication of the contribution of this study to positive psychology research, is that well-being can be experienced and promoted among adolescents in impoverished contexts even when they were surrounded by apparent socio-economic challenges.

Secondly, the current study contributed to the body of literature concerned with understanding gender differences in the relationships between hope, perceived social support, life satisfaction, psychological well-being and psychological distress. The current study demonstrated what relationships were significant for males and those relationships that were significant for females. These findings have implication for planning interventions.

Thirdly, the inclusion of psychological well-being as a separate latent variable from life satisfaction was important. This is because previous studies have focussed on life satisfaction as a major outcome variable (Gilman & Huebner, 2003, 2006) and not considered the possible consequences of domain-specific satisfaction with life among adolescents. Additionally, although there is extensive research on life satisfaction, the mediating effect of this variable has not been tested in previous positive psychological research. This finding has shown that positive indicators could play multiple roles in predicting well-being.

Fourthly, the separation of the two latent variables (that is, psychological well-being and psychological distress) in the structuring of the model was also useful. Previous studies among adolescents have focussed on the impact of positive psychological variables on outcome variables such as depression and anxiety (Esteves et al., 2013) as well as life satisfaction (Valle et al., 2006). Clear distinctions on the relationships and paths from

variables such as hope to underlying composite variables such as psychological well-being or psychological distress has not been explored, at least not, in the context of the current study.

Fifthly, the differential impact of hope on life satisfaction and psychological well-being showed that the multidimensional measurement of life satisfaction differed from psychological well-being, which included a single item measuring overall satisfaction with life. The present study ascertained that being hopeful could influence satisfaction in different domains but not necessarily overall psychological well-being. Additionally, the mediation model of hope and psychological well-being via life satisfaction demonstrated that, psychological well-being was determined by the joint effect of hope and domain-specific satisfaction with life. This implied that hopeful thinking in specific domains in adolescents' lives, which led to satisfaction in those domains was necessary for psychological well-being.

Sixthly, a salient contribution of the current study is a theoretical understanding of the structure of psychological well-being in the Ghanaian context. Although, the current study is the first of its kind, it provides a foundation for understanding what constitutes psychological well-being in the Ghanaian context. Additionally, the fact that the hypothesised model was found to have a good fit with the observed data also suggests a possible model and framework that could be adopted in MHP interventions. The findings of the present study also suggests a possible dual-factor model that distinctly represents psychological well-being and psychological distress. Moreover, the current findings seemed to indicate that the suggested dual-factor model would include life satisfaction as a key predictor of both positive and negative states of mental health.

Seventhly and finally, the findings of the present study provide external validity for the relationships among the variables that were studied. This is because previous research on the relationship among these variables has been found in the west but not in other contexts such as Ghana.

6.2. Implications for Theory, Research, Mental Health Promotion and Policy

Some of the implications of the present study are outlined in the following paragraphs. Given that the dual continuum model posited by Keyes (2005, 2007) was partially supported in the present study, it would imply that the theoretical conception of mental health as simply the absence of disease within the Ghanaian context needs to be revisited. Further research is needed to establish conclusive evidence on whether mental health and mental illness are on different continua among adolescents in Ghana (a possible dual-factor model). The proposed 13-item dimension of psychological well-being (Keyes, 2003) could be tested among the adolescent population in order to satisfy the claim of the existence of a continuum measuring psychological well-being. Findings from such studies would provide evidence for practitioners to argue for more investment in mental health promotion strategies among adolescents, and not only disease prevention, which is currently a neglected area of research.

Other important implications can be drawn from the two models that were tested. For both the model without gender and the model comparing males and females, the constructs that were explored seem to explain psychological well-being and not psychological distress. No significant path was found connecting any of the variables with psychological distress. This implies that psychological strengths such as hope and positive experiences such as perceived support and life satisfaction are more instrumental for improving psychological well-being compared to the reduction of distress, among school-going adolescents in the Ghanaian context. Therefore, practitioners in health and school psychology must harness efforts towards improving these indicators. The implication for positive psychological thinking is that positive experiences could be more instrumental for promoting positive mental health, and not psychological distress.

The gender differences in the hypothesised relationships have implications for research and practice. One implication for research is that there is a need for further theoretical explanations on the differences in the hypothesised relationships. Additionally, interventions aimed at improving mental health must be implemented with necessary considerations being given to possible gender differences and socio-cultural norms regarding gender.

Furthermore, the findings of the current have some important implications for education in poor regions of Ghana. Adolescents described education as being instrumental for feeling hopeful and experiencing satisfaction with life. Some adolescents also identified peers at school as their most important source of support. This implies that adequate attention needs to be given to the educational sector in the Northern region of Ghana. More resources could be harnessed to ensure that an increased number of adolescents have access to education. There should also be governmental support geared towards providing the necessary infrastructures in most secondary schools as a number of them lacked such facilities. If these adolescents were going to continue to have hope for the future, then education was an important area that required immediate attention. A full compulsory universal basic education, which includes secondary education, could be implemented in this region.

As mentioned in the introductory chapter (Chapter 1), the inclusion of mental health into primary health care is in its infancy and there is only a minimal presence of mental health practitioners in school settings. Findings of this study demonstrate the need for such personnel in schools within the Northern region of Ghana. Additionally, the present human resource in school settings could be trained to implement basic health promotion interventions and also incorporate life skills training into the curriculum. There is also the need for training more school and educational psychologists that could be eventually

deployed by the Ghana Health Service (GHS) and the Ghana Education Service to schools in the Northern region. Community programmes targeted at improving the quality of care-givers would also be useful given the dissatisfaction expressed by some adolescents, especially with regards to the kinds of treatment they received from their primary care-givers.

6.3. Limitations

Although contributing immensely to the field of positive psychology, MHP and research on the mental health of adolescents, the current study was still not without limitations. These limitations and recommendations for future research are discussed in the following paragraphs. Firstly, despite the fact that the study tested a model to determine its fit with the observed data, causal inferences regarding the relationships among the variables (hope, perceived social support, life satisfaction and mental health) could not be ascertained. This was due to the cross-sectional nature of the study. A longitudinal study or a controlled experimental setting is necessary for predicting possible causal relations among the variables. However, the confirmation of the hypothesised paths in the current study, suggests one of the likely pathways connecting the variables.

The second limitation of the current study pertained to sampling size. Notwithstanding, the use of a probability multi-stage cluster sampling technique, there were still limitations associated the selection of participants. Notable was the researcher's inability to select participants from each of the 24 districts in the Northern region of Ghana and the selection of a limited number of schools from the metropolitan city. However, this limitation was partially managed with the thorough sampling technique that was adopted, which increased the representativeness of the sample. This involved a random sampling of schools across the metropolitan, municipality and districts administrative divisions as well as a random sampling of learners from each of the schools.

An additional limitation related to sampling (which fell completely outside the researcher's control) pertained to one of the schools used in the first (quantitative) phase of the study not being represented in the follow-up, qualitative phase. This was due to the researcher being denied further access to the school to progress with the second phase of the study. It was of interest to also note that, as a result of limited accessibility to other (private) schools, only public schools were represented in the study. With access to private schools being a consideration, future studies should explore the possibility of conducting research in both Ghanaian private and public schools in order to ascertain if the salient issues emanating from the present study were uniquely representative of public school life, or affected private schooling as well.

Thirdly, the use of a purposive sampling technique for selecting participants for the qualitative phase of the study limited the generalisability of the qualitative results. The findings from the qualitative phase were unique in explaining the experiences of hope, perceived social support and life satisfaction among selected adolescents in the current study. However, the findings from the quantitative phase and relationships that were drawn between the qualitative descriptions and the statistical relationships allow for some generalisation of the qualitative results.

Given that the current study focussed on one sample, future studies could involve multi-group comparisons. For example, adolescents enrolled in secondary schools from the rest of the Northern region could be compared to those from the Southern regions in order to increase generalisability. Additionally, school-going adolescents could be compared with adolescents that have not had the opportunity of formal education. This is necessary because, as already stated, education formed an important domain in the lives of adolescents and was responsible for judgements of satisfaction.

Fourthly, the scale that was used to measure psychological well-being could have included other indicators such as autonomy, mastery, meaning, to mention a few (Keyes, 2003; Ryff, 1989). Future research in the Ghanaian context could be focussed on understanding the structure of psychological well-being. Research aimed at developing strong theoretical foundations for understanding psychological well-being as well as the indicators that are peculiar to the Ghanaian context could be the focus of future research. Additionally, future research is needed on the role life satisfaction in predicting well-being. Conclusive evidence is needed to demonstrate whether life satisfaction is a better antecedent, mediator or consequence of positive indicators of well-being.

Fifthly, cognitive testing of the instruments on children would have been useful in determining the applicability of the scales to the present sample. In addition, a pilot study could have been useful in validating the tools that were used in the study.

Sixthly and finally, the findings of the current study were limited in their explanation of the variance in psychological distress. Further investigation is needed to explain how hope, perceived social support and life satisfaction might be related to psychological distress in the Ghanaian context. Other variables could be introduced into the model to determine whether they would mediate the relationship between the positive psychological variables and psychological distress. Further studies should also focus on understanding the gender differences in the relationships among the constructs tested in the current study. In addition, future scholarly work could focus on gathering normative data on levels of hope, perceived support, life satisfaction, psychological well-being and psychological distress. This would enable practitioners and policy-makers to be aware of the prevalence of psychological distress and to also know the number of people experiencing psychological well-being or flourishing mental health.

6.4 Concluding Remarks

Overall, the findings of the present study revealed a possible model for understanding psychological well-being among the present sample of school-going adolescents in the Northern region of Ghana. This model comprised direct and indirect relationships between hope, perceived social support, life satisfaction and psychological well-being. Additionally, the present study has added to the body of knowledge that espouses the importance of positive experiences for psychological well-being, and has also provided external validity on the relationships between these constructs. Moreover, the findings of this study has demonstrated that the period of adolescence is a good platform for fostering psychological well-being, through the promotion of psychological strengths even the face of social, psychological and physiological challenges.

The qualitative findings provided context-specific information, which led to an improved understanding of the relationship between hope, perceived social support, life satisfaction and psychological well-being. Furthermore, these findings provided information on how these constructs were interpreted, thereby showing to what extent they reflected western quantitative measures. Relatedly, the qualitative findings demonstrated how positive experiences were engendered in the midst socio-cultural influences and extreme poverty during the salient period of adolescence. Emerging findings from the qualitative data also illustrated that a multiplicity of factors (in addition to structural relations among latent constructs) is important for adolescent psychological well-being. Some of these factors included material resources, spirituality, maintaining positive relations with peers, academic success and educational privileges. Although not apparent in the structural relations, deficient care-giving and lowered self-worth, as a result of support-seeking, seemed to negatively affect the well-being of school-going adolescents. The multiplicity of factors has broadened our knowledge on psychological well-being, and also proven that a simplistic explanation of

human behaviour is usually inadequate for understanding every unique social context.

Moreover, these new insights have advanced evidence suitable for psychological, social and public health interventions.

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Appendices

Appendix A: Demographic Questionnaire

Instructions: Indicate by ticking responses applicable to you

1. What is your gender?

Male

Female

2. What is your age? _____

3. What is your current level of education?¹²

SSS1

SSS2

SSS3

4. Where do you currently reside within the region.....

5. To which of the following religious affiliations do you belong (mark the applicable box)?

Christian

Muslim

Other

6. If you chose other please indicate which religion.....

7. Do you live with both parents?

Yes

No

8. How many people, apart from you, lives in your household

Four and below

Five to ten

More than 10

¹²*The SS1, SS2 and SS3 school grades are equivalent to Grades 10, 11 and 12, respectively, in South Africa.

Appendix B: Interview schedule

In the following set of questions, you are requested to say as much as possible (there are no right or wrong answers – just say what is on your mind, and how you feel about what is asked).

ABOUT YOURSELF

1. If someone were to ask you to describe yourself, what would you say (how would you best describe yourself)?

.....
.....

ABOUT YOUR ASSESSMENT OF YOUR LIFE

2. How would you describe or evaluate your life? How would you describe your life in general?

.....
.....

..

3. Are you generally happy and satisfied with the events going on in your life? How would you define happiness (What does happiness meant to you)? Tell me more about the things that make you happy?

.....
.....

4. And how would you define life satisfaction (What does life satisfaction mean to you)? Tell me more about the things that make you satisfied with your life?

.....
.....

5. Are there things in your life you would want to change, if so what are they and why?

.....
.....

ABOUT YOUR RELATIONSHIP WITH OTHERS

6. How would you describe your relationship with people around you? First your peers, family and any significant others (who stands out most in people you have a special and close relationship with, and how would you describe the relationship?)

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.....

7. Looking at the relationships that you have just described, what would you consider as having been adequate or valuable support that you have received? Or would like to have received? Would like to receive tomorrow or in the future?

.....

8. Any source/media of social support that we might not have talked about?

.....
.....

ABOUT HOPE FOR THE FUTURE

9. When you think about the word “hope” what generally comes to your mind? What does hope mean to you? Can you relate to me/share your particular experiences of hope? And what were these experiences based on?

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.....

10. I would like to know how you think about your life and your future. What is your general outlook towards life and your future?

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.....

11. How do you see your future (and what do you think the future holds for you)?

.....
.....

12. Can you describe what brings you hope? What aspirations do you have for the future? What in particular engenders hope?

.....
.....

RESOURCES FOR COPING

13. Do you feel that you have the needed resources to cope as a learner? (What kind of resources have these been?)

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.....

14. When you are in a stressful situation, what personal resources do you make use of (what works best for you, and what does not work)?

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.....

15. If a friend of yours were in a challenging or threatening situation, what would you recommend they did? Would you do same were you to be in a similar situation?

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.....

Appendix C*Subscales and Items Retained as Parcels for Composite Scores*

Latent variable-subscale	Items used to compute composite scores
Hope-Trust and confidence	1, 5, 7, 9, 15, 21, 23
Hope-Lack of perspective	2, 19
Hope-Positive future orientation	8, 17, 22
Hope-Social relations and personal value	11, 14, 20
Life satisfaction-Family	1, 2, 3, 5
Life satisfaction-friends	8, 9, 12, 14, 16
Life satisfaction-School	18, 21, 22, 23, 24
Life satisfaction-Living environment	29, 30
Life satisfaction-self	34, 37
Perceived social support-Family	3, 4, 8, 11
Perceived social support-Friends	6, 7, 9, 12
Perceived social support-Significant others	1, 2, 5, 10
Psychological well-being-General positive affect	5, 6, 7, 12, 17, 31, 34, 37
Psychological well-being-Emotional ties	10, 23
Psychological well-being-Life satisfaction	1
Psychological distress-Anxiety	11, 13, 15, 25, 29, 32
Psychological distress-Depression	19, 30, 36
Psychological distress-Loss of behavioural and emotional control	16, 20, 21, 27