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THE INFLUENCE OF SOCIAL SUPPORT, SPIRITUALITY AND RESILIENCE IN THE SUBJECTIVE WELL-BEING OF PARENTS OF CHILDREN WITH SPECIAL NEEDS

BY

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DECLARATION

I do hereby attest that the current thesis is the outcome of my own research and no other person has presented it for academic laurels to this university or any other. Every single reference used in this research has been appropriately acknowledged. I bear full responsibility for any identified drawback of this research.

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ABSTRACT

It has previously been established that social support and spirituality influence the well-being of parents of children with special needs. To date, few literatures have examined the psychological process through which these protective resources exert their effects on well-being. This study explored whether social support and spirituality predicted the subjective well-being (i.e., Life satisfaction, Positive affect and Negative affect) of parents of children with special needs in Ghana. It further examined the mediating role of resilience in the relationship between social support and subjective well-being as well as spirituality and subjective well-being. A total of 107 biological parents were sampled from two support groups and special schools where their wards attended to complete both online or paper-and-pencil surveys on life satisfaction, positive affect, negative affect, resilience, social support and spirituality in this correlational study. The results of multiple hierarchical regression indicated that social support predicted life satisfaction and negative affect but not positive affect whereas spirituality predicted all three components after controlling sociodemographic variables. Moreover, mediational analyses revealed that social support and spirituality indirectly influenced life satisfaction, positive affect and negative affect through resilience. Specifically, greater levels of social support and spirituality, predicted greater resilience, which successively led to greater life satisfaction, also positive affect and lesser negative affect. These results emphasize the necessity of targeting parents' well-being through resilience to help them deal with the burdens of providing care for their children with special needs.

Keywords: Subjective well-being; Social support; Spirituality; Resilience; Life satisfaction; Positive affect; Negative affect; Parents; Children with special needs

DEDICATION

I dedicate this work particularly to all parents or caregivers of children raising children with special needs in Ghana and beyond as well as everyone else in my social network.

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LIST OF ABBREVIATIONS

ADHD	Attention deficit hyperactivity disorder
ASD	Autism spectrum disorder
DD	Developmental disorders
DS	Down syndrome
GSS	Ghana Statistical Service
ID	Intellectual disability
LS	Life satisfaction
NA	Negative affect
PA	Positive affect
SWB	Subjective well-being
UNICEF	United Nation's Children Fund

CHAPTER ONE

Introduction

Background of Study

Most children grow up without requiring special health care needs or educational needs; whereas others, due to chromosomal defects, central nervous dysfunction or environmental factors, require a lifetime of special attention (Payne & Isaacs, 2002). Children with special needs or special healthcare needs (popularly referred in literature as children with disabilities or developmental disorders [DD]) have been described to be "those who have or are at increased risk for a chronic physical, developmental, behavioural, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally" (McPherson et al., 1998, p. 138). Typical childhood disorders, namely, Down Syndrome (DS), Autism Spectrum Disorder (ASD), Cerebral Palsy (CP) and Attention Deficit Hyperactivity Disorder (ADHD) are among the many disorders that characterizes a child as special. Aside these neurodevelopmental disorders, the United Nations Educational, Scientific, and Cultural Organization (1994) widens the definition by including under this term, children engaged in child labour, living a great distance from their school, dwelling in the streets, living in abject poverty or are malnourish among others.

These children are considered special because they require interventions in caregiving, healthcare and education in hopes to improve their conditions. Take a child diagnosed of any developmental disability for instance, in more subtlety, a child with severe ASD. Because of their deficits (e.g., engaging in stereotypical behaviours, deficits communicating and interacting socially and have no or delayed speech and language skills [American Psychiatric Association, 2013]) such a child may require communication interventions, constant medical screening,

specialized education, personalized nutrition to even auxiliary alteration to home environment (Nurullah, 2013) and it is generally the duty of primary caregivers to provide these exceptional demands. As primary caregivers, parents are to a large extent responsible for their children with special needs and this has been depicted to majorly affect parents. These parents often end up juggling the excessive needs of their child with special needs, their own needs and that of other members of their families. By so doing, they find themselves financially (Goudie, Narcisse, Hall & Kuo, 2014), emotionally (Weitlauf, Vehorn, Taylor & Warren, 2014) and physically (Gallagher & Whiteley, 2013) overwhelmed. Findler, Jacoby and Gabis (2016) unequivocally capture this momentous experience by expressing that "the birth and the presence of a child with a developmental disability often lead[s] to stress and challenge for the child's entire family" (p. 44).

Not surprising though are findings of empirical evidence. It has been suggested that parents or caregivers of children with special needs compared to their counterparts who have normally developing children experience deleterious degrees of depression, anxiety and stress (Falk, Norris & Quinn, 2014; Singer, 2006). They also experience other crippling repercussions such as financial hardship (Emerson & Hatton, 2009) and relationship or marital discord (Hartley et al., 2010). Research has additionally discovered that amongst the population of parents raising children with special needs, it is parents of children with ASD who typically report higher burden levels. An example of such research is a meta-analysis conducted by Hayes and Watson in 2013 comparing parenting stress levels among parents of children with ASD and parents of children with other disabilities (e.g., Down syndrome and intellectual disability [ID]). The researchers found a significant effect size of 0.64 indicating higher stress levels among parents of children with ASD. Two factors that have been consistently linked with these distinctive levels

of parenting stress are (1) the peculiar behavioural problems that children with ASD often exhibit and (2) the autism symptom severity (Dieleman et al., 2018). Considerable research examining gender variations in burdens among parents, have also suggested that mothers carry greater burdens than fathers. For instance, Foody, James, and Leader (2015) and Vilaseca, Ferrer and Olmos, (2014) intimated that mothers reported greater levels of anxiety, distress and depression than fathers while Roper, Allred, Mandleco, Freeborn and Dyches (2014) suggest that mothers experienced greater levels of caregiver burden. This has largely been attributed to the traditional role of primary caregiver usually assumed by mothers. Nevertheless, other studies (e.g., Davis & Carter, 2008; Ha, Hong, Seltzer & Greenberg, 2008) have found no such difference, so must not be taken as conclusive.

Notwithstanding these negative consequences linked to raising a child with special needs, there is accumulating evidence to suggest that parents do sometimes overcome their burdens and productively manage their stressors thereby improving well-being (Kayfitz, Cragg & Orr, 2010; McGlone, Santos, Kazama, Fong, & Mueller, 2002; Trute, Benzies, Worthington, Reddon & Moore, 2010). According to McCubbin and Patterson (1983) this occurs when these parents have access to resources such as, social support, good marital adjustment, optimism, spirituality, hope and positive coping strategies. Considering this, the present research examined how factors like social support, spirituality and resilience contribute to the subjective well-being (SWB) of parents of children with special needs in Ghana. This study further examined the mediating role of resilience in the relationship between social support and SWB as well as spirituality and SWB.

Subjective well-being, social support, spirituality and resilience.

Subjective well-being has been described as consisting three key components namely Life satisfaction (LS), Positive affect (PA) and Negative affect (NA). Life satisfaction is the

cognitive evaluation index concerned with a person's total satisfaction levels or contentment while both positive affect and negative affect are the emotional indices, indicating people's moods (Busseri, & Sadava, 2011). Ed Diener regarded as the father of subjective well-being describes these three components as key to its definition. SWB is a construct used in social scientific research to study happiness and is defined as the "a person's cognitive and affective evaluations of his or her life" (Diener, Lucas, & Oshi, 2002, p. 63). Gallagher (2009) has also defined a happy person to be that person who evaluates themselves as highly satisfied with life, experiences incessant amount of positive moods, the reduced levels of negative moods. Such a person has also been found to be mentally and physically healthier, report more intimate relationships with others and more productive and successful at work (Diener & Ryan, 2009). This popular concept of SWB is characterized under the hedonic perspective of well-being. Hedonism philosophy describes happiness to be stable across life-span, though it may respond to changes in life circumstances, it always returns to its former state where positive emotions predominates negative ones (Diener, 2000). Moreover, success is contingent on personal and external resources; a person who possesses enough social support will return to experiencing pleasant emotions after a negative life event (e.g., motor accident). That said, expressing higher positive emotions and life satisfaction and reduced negative emotions is contingent on one's personal and external resources. Resources or protective factors, such as social support, spirituality and resilience serve to lessen the detrimental effects of having a special child and increase subjective well-being.

Social support may be described as the tangible (e.g., food and money) or intangible (e.g., verbal motivation and love) assistance perceived or received from or given to persons in one's social network. These social networks could include people of close contacts such as parents,

family members or friends and persons in extended contacts such as neighbours, colleagues or superiors. Researchers have further distinguished between perceived social support and actual or received support and have indicated that perceived social support more than received support promotes well-being (Barrera, 1986; Wethington & Kessler 1986). Social support can therefore be understood as the social, psychological and interpersonal assistance that sustains and elevates health and well-being (Gottlieb, 2009). According to this definition, social support is pertinent to the overall functioning of an individual. This is particularly true for Ghanaians and Africans as it is embedded in everyday life and people rely largely on their social interactions for assistance through thick and thin (Gyekye, 1997). It has been determined that social support is a critical resource that reduces the unfavourable impacts of providing for a child with special needs among parents (Meadan, Halle & Ebata, 2010). Parents who demonstrate high levels of social support also demonstrate more psychological well-being than those who report less support (Ma, Lai & Lo, 2016).

Just like social support, spirituality is a vital protective resource used by many in times of adversity, and it pervades every aspect of Ghanaians' life (Gyekye, 1996). Spirituality is the process whereby individuals make meaning and find purpose in life (Piedmont, 1999). Pargament's (2009) definition— "a search for the sacred" (p. 928)— also affirms spiritualty as a process. Both definitions indicate that, spirituality is personalized and takes efforts from the individual to discover or attain a definable relationship with the Almighty, God, Allah, the transcendent being or the divine. Usually to achieve this closure, people take several pathways including conventional religious beliefs and practices (e.g., prayer, meditation, rituals, church attendance, fasting, Bible study, singing or listening to religious songs). Others may choose to toe an entirely different or nonreligious line, such as volunteering, donating resources to the

needy, developing intimate relations with others and adopting a humble lifestyle. Hereupon a distinction must be made between spirituality and religiosity. Religiosity may be described as either communally or individually organized practices, rituals, guidelines of conduct or belief systems which serves as a conduit to transcendental experience (Emmons, 1999; Tarakeshwar, Stanton & Pargament, 2003). Spirituality on the other hand is a personal and intrinsic experience of a transcendental being that hinges on religious practices but, could equally be attained through nonreligious means. Researchers have argued that these two constructs highly overlap and similarly affect health and well-being thus should not be treated as farfetched (Zinnbauer & Pargament, 2005). Spirituality is asserted to accord individuals with all sorts of positive emotions as well as improve physical and mental health (Cheadle & Schetter, 2017; Gall et al., 2005; Seybold & Hill, 2001; Smith, Ortiz, Wiggins, Bernard & Dalen, 2012). Persons with greater amount of spirituality also have reported experiencing greater well-being levels (Ivtzan, Chan, Gardner & Prashar, 2013). For parents of children with special healthcare needs, spirituality has been suggested to be critical source of their well-being (Pandya, 2017) and much more a tool for emotional support and positive adaption (Fox, Vaughn, Wyatte & Dunlap, 2002; Lin, 2000)

Several definitions have been advanced since the inception of research in resilience. Nevertheless, most of these definitions contain two cardinal elements: (1) a person exposed to adversity; (2) the person doing well or able to overcome this adversity. A child, despite being abused by parent, puts up a stellar academic performance in school. From this example, the two-cardinal element of resilience is illustrated. To Masten (2014a) resilience is the dynamic capability of a person to successfully adapt despite threats to their viability, functioning or development. Panter-Brick and Leckman (2013) simply defines it as a process where resources are utilized to sustain or promote well-being. In any person's life, resilience emerges because of

their interactions with personal, biological, social and environmental factors. Resilience researchers have studied many of these factors, which have come to be referred to as protective and promotive factors and have found that they are responsible for positive adaptation in the face of crisis (Cutuli & Masten, 2009). Two of these protective factors namely social support and spirituality, are studied in the present study. Resilience proponents (e.g., Southwick, Bonanno, Masten, Panter-Brick & Yehuda, 2014) have asserted that in studying resilience, it behoves any researcher to suitably delineate whether it is a predictor of a health-related outcome, a mediator between a protective factor and an outcome or an outcome predicted by a protective factor. Therefore, in the present study, resilience is studied as a mediator. Meaning that, protective factors (social support and spirituality) may influence the ability to recover from the stressful demands linked to raising a child with special healthcare needs and this ability of parents, in turn, may directly have a relationship with their SWB.

Prevalence of children with special needs in Ghana.

The United Nation's Children Fund ([UNICEF], 2013) indicates that over a billion people representing 15% people in the world have some kind of disability and of this estimate, children with disabilities aged 0-18 years make up between 93 million and 150 million, with more males than females been affected (Christensen et al., 2016; Maulik, Mascarenhas, Mathers, Dua & Saxena, 2013). However, UNICEF (2013) cautions against the reliability of these estimates pointing out to the fact that there were some accompanying challenges and discrepancies arriving at these estimates. The following are some of the given reasons: "out-dated definition and measures of disability are often used to gather data; inadequate resources and statistical capacity exist in many countries; and children with disabilities are often rendered invisible in institutions or have their existence denied by their families" (UNICEF, 2013, p. 10).

Narrowing it down to Ghana, statistical reports from the Ghana Statistical Service ([GSS], 2012) reveal that as of 2010 close to a million people exactly 737,743 people representing 3% of the total population were living with the following disabilities or challenges: visual, hearing, speech, physical, intellectual, emotion/behavioural and other. It was also estimated that about 200,000 children between the ages of 0-19 were living with disabilities (GSS, 2013). Of this number, there were more males affected with a disability than females, mirroring the global gender ratio. One failure with this census is that it does not provide specific numbers of developmental disorders namely, ASD, ADHD, CP, DS etc., instead it categorizes them under broader terms like intellectual or physical or emotional/behavioural challenges. Nevertheless, it is speculated by Rural Integrated Relief Service-Ghana (2010) that 1 out of every 87 of children under the age of 3 in Ghana has or have ASD.

Raising a child with special needs in Ghana.

Africans are generally influenced by their beliefs, values, and culture (Abosi, 2007). For the continuity of these traditional belief systems, the birth of a child is deemed an important moment not only for the immediate family but the entire society. This child is regarded as a vessel to be imparted with cultural knowledge and a medium for transmitting this knowledge. As such, it is expected of any child born in an African society to “conform” to the ideal child (i.e., to meet their entire developmental milestone) and any deviation from this, in a form of a disability is met with disdain.

In Ghana, a similar trend can be observed where various ethnic groups hold entrenched beliefs about giving birth to an ideal child, but once a child is born with a disorder, all manner of maltreatment is meted out to the child and its family. In such cases such a child is called by derogatory names, ridiculed, dehumanized and stigmatized. For instance, a child born with DS is

called “nsuoba” literally translated to “water child” by the indigenes of the Brong-Ahafo region of Ghana (Agbenyega, 2003). This indigenes strongly believe that such a child is cursed or evil and the child was jinxed by the mother after violating a taboo that prohibits pregnant women from eating fish from a sacred river. These beliefs are usually fuelled by a wide misconception about the causes and implications of disabilities. Anthony (2009) further asserts that these misconceptions are chiefly influenced by the traditional or religious views of people in Ghana. These views consequently elicit stigma and discrimination. In many cases, and by the mere fact of being related to a person with special needs, families also experience these social prejudice and discrimination. These families are socially excluded: they are unable to attend community functions for the fear of feeling embarrassed or ridicule by other members of the community (Anum, 2011). To avoid such instances, most parents, caregivers or family members resort to extreme or rather cruel measures such as, abandoning their children, hiding them from prying eyes and even killing them (Avoke, 2002).

Aside struggling with social stigma, evidence from anecdotal studies has revealed that Ghanaian parents and caregivers just like their Western counterpart experience myriad of challenges linked to raising children with special needs including elated levels of stress, depression, anxiety, financial difficulties, family neglect, marital problems and divorce among others (Ae-Ngibise, Doku, Asante & Owusu-Agyei, 2015; Anum, 2011; Oti-Boadi, 2017). These challenges are further compounded: most of these parents and their children receive little to no form of social service intervention or subvention from the government (Quarshie, 2018) as compared to most Western countries (O’Brien, 2016; Ullrich, 2017)

Statement of Problem

Parenthood involves adjusting to unpredictable demands (Aunos, Feldman, & Goupil, 2008). The demands of managing a family while maintaining a full-time employment becomes exceedingly stressful for parents with the presence of a special child. Due to this, parents have been reported to experience reduced well-being (Herring et al., 2006), depression and anxiety (Dave et al., 2017), stress (Davis & Carter, 2008), marital problems (Risdal & Singer, 2004) as well as coping and adjustment challenges (Higgins, Bailey & Pearce, 2005). However, bulks of these studies have focused on negative consequences. Even the few studies that have been conducted in Ghana (e.g., Aarah-Bapuah, 2015; Anum, 2011; Nyasor, 2012) have mostly focused on the negative experiences of caregivers (e.g., stigma, financial hardship, relationship challenges etc.) to the neglect of the positives (e.g., life satisfaction, psychological well-being, coping etc.). Contrary to this, contemporary research has suggested that some families or parents do develop positive sentiments despite their struggles (Kayfitz et al., 2010; Trute et al., 2010).

This ability of developing positive sentiments may constitute evidence of resilience. Literature has shown that those individuals who experience stressful life events and are able to overcome them to maintain high well-being are known as resilient (Ryff & Singer, 2000). Resilience among parents of children with special needs has also been previously explored. A recent study conducted among mothers of children with ASD and other disorders found that mothers' resilience had a positive relationship with well-being outcomes (Halstead, Ekas, Hastings & Griffith, 2018). Similarly, Bitsika, Sharpley and Bell (2013) found that psychological resilience of parents of children with ASD buffered against high degrees of depression and anxiety associated with high levels of daily parental stress. Thus, resilience can be said to be a great source of well-being among parents. Developing resilience as has already been indicated,

requires the presence of protective resources such as social support, optimism, locus of control, cognitive appraisal, religiousness and spirituality; these factors provide a protective psychological mechanism while reducing the negative consequences related to the experience of chronic stress (Bekhet, Johnson & Zauszniewski, 2012). Based on mentions as major coping resources among parents of children with disabilities in Ghanaian qualitative studies (e.g., Ae-Ngibise et al., 2015; Oti-Boadi, 2017), two of these protective factors namely social support and spirituality were selected. Both protective factors are intimated to be positively related to resilience. Amongst parents of children with ASD, a study found that resilience was significantly predicted by self-practice spirituality (Pandya, 2018). Ruiz-Robledillo, De Andrés-García, Pérez-Blasco, González-Bono and Moya-Albiol (2014) similarly indicated that social support was positively related to resilience among genitors of children with ASD.

Thus, considering the established relationships between social support, spirituality, resilience and well-being amongst parents of children with special needs, one may ask "will resilience act as a mediator between social support, spirituality and SWB?". No existing research to the best of knowledge, has tested the potential mediation of resilience in the relationship between social support, spirituality and SWB among parents of children with special needs. Therefore, it makes it prudent to find out the influence of social support and spirituality on the ability of parents to recover from the stressful demands linked to raising a special child; furthermore, this ability's indirect influence on subjective well-being.

Aim and Objectives of study

The general aim of the current research was to examine the influence of social support, spirituality and resilience on the subjective well-being of Ghanaian parents of children with special needs.

Specific objectives are as follows:

1. To determine whether social support predicts parents' SWB.
2. To determine whether spirituality predicts parents' SWB.
3. To find out whether resilience is a potential mediator in the relationship between social support and SWB of parents.
4. To find out whether resilience is a potential mediator in the relationship between spirituality and SWB of parents.

Relevance of Study

Foremost, a preponderance of studies in this field have been conducted in developed countries due in part to factors like ease in recruiting research participants, availability of research resources and of expertise (Chu, Jayaraman, Kyamanywa & Ntakiyiruta, 2014). Despite the absence of these factors in developing countries, research still needs to be conducted to bridge this apparent disproportion of knowledge. Therefore, the current study seeks to address this dearth by considering the unique experiences of Ghanaian parents and thereby contributing knowledge to the literature of parenting children with special healthcare needs in Ghana and Africa.

Another importance is the contribution of knowledge to the wider literature of subjective well-being and its advancement in Ghana. Most SWB proponents have stressed that any study into SWB should consider all three components or indices (i.e., Life Satisfaction, Positive Affect and Negative affect; Diener, 2000; Gallagher & Vella-Brodrick, 2008) unlike what has previously been done by majority of researches whereby only a component or two have been considered (e.g., Shenaar-Golan, 2016; Werner & Shulman, 2013). These proponents have emphasized this consideration on the basis that the components are related although separate;

therefore, the components ought to be studied together to provide more differential information about the antecedents or consequences of SWB. Accordingly, the present research considers all three components and disaggregate them for better understanding of what predictors uniquely predicts them.

The onus of providing for children with special needs falls largely on parents and immediate family. As primary caregivers, they provide shelter, love, food, security and an environment to grow. They ensure the well-being of their children and provide resources to help improve their conditions and meet their developmental milestones. The well-being of the special child can thus be said to be indispensably tied to the well-being of their parents or caregivers; that is, the happier the parents are, the happier the child will be. It is nonetheless necessary to provide caregivers with knowledge about their well-being, the factors influencing it and how they may improve it. Increasing the subjective well-being of parents would not only benefit them, their children and family, but their community at large. With increased subjective well-being, parents will be highly productive and positive at work, experience better physical and mental health, participate in advocacies and express other positive characteristics. Just like the relevance of knowledge about their well-being, knowledge about how to promote resilience will be of great significance to parents, especially for these parents who are already experiencing significant stress. Parents can help themselves by accessing knowledge about how others were able to handle the challenges linked to having a special child.

"Research exploring happiness and its predictors is important because it illuminates factors that foster optimal psychological functioning" (Gallagher & Vella-Brodrick, 2008, p. 1552). In other words, the findings of this research would go to inform the designing and implementation of effective intervention programs targeted at increasing the subjective well-

being and resilience of such families. Furthermore, understanding the complex interrelationship between social support, spirituality, resilience and SWB can help psychologists, counsellors and educators in designing appropriate interventions for parents and the general mental health delivery in Ghana and beyond.

The study of third variables is said to be essential to the advancement of theories and psychological therapies. According to Windgassen, Goldsmith, Moss-Morris and Chalder (2016), mediational studies in psychology are important because they provide findings that help in altering therapeutic or intervention approaches. The researchers further explained that mediation mechanisms lead to the delivery of an efficacious therapy by revealing which aspects of the therapeutic processes needs refining or discarding. Mediators are inherently introduced to answer 'how or why' a predictor is related to a criterion variable thereby enabling researcher to extend bivariate relationships (Karazsia, Berlin, Armstrong, Janicke, & Darling, 2013). These answers essentially assist researchers in reshaping or propounding theories. An example of a theory developed and reshaped by introducing a third variable is Ajzen's Theory of Planned Behaviour. Therefore, the current research findings are relevant in improving intervention and advancing theories.

CHAPTER TWO

Literature Review

This study examined how factors like social support, spirituality and resilience contribute to the subjective well-being ([SWB] i.e., Life satisfaction [LS], Positive affect [PA] and Negative affect [NA]) of parents of children with special needs in Ghana. It further examined how resilience mediates the association between social support and SWB as well as spirituality and SWB. In this chapter, two theories and a model relevant to explaining these variables are discussed. This chapter further reviews related literature, establishes a rationale for the study, makes statement of hypotheses, provides a conceptual framework and finally enumerates the operational definition of terms.

Theoretical Framework

The principal of parsimony encourages researchers to use the simplest theories or models to explain and understand a phenomenon; therefore, Top-down and bottom-up theories of SWB (Diener, 1984), Resilience theory (Rutter, 1985) and Tripartite model of subjective well-being (Diener, 1984) were used to understand and explain the link between the study variables.

Tripartite model of subjective well-being (Diener, 1984).

This model pioneered by Ed Diener in 1984 simply describes subjective well-being as composed of three primary indices or components: life satisfaction (LS), positive affect (PA), and negative affect (NA). Life satisfaction is the cognitive evaluation index concern with a person's total life satisfaction levels or contentment while both positive affect and negative affect are the emotional indices, indicating people's favourable and unfavourable emotional experiences of life (Busseri, & Sadava, 2011). For Diener, a person describes themselves as happy or content when they are reporting pleasant emotions frequently, negative emotions

infrequently and elevated levels of life satisfaction (Gallagher, 2009). Furthermore, Diener and Biswas-Diener (2002) have intimidated that, although the components are related, in conceptualizing and studying SWB, life satisfaction, pleasant mood and unpleasant mood must be treated as separate and independent constructs. Busseri and Sadava (2011) and Busseri (2014) seeking to address the paucity of systematic reviews of the compositions of SWB, carefully examined and expanded five prominent conceptual models which have been described in the subjective well-being literature. These models include, (1) SWB as three separate structure, the first model; (2) SWB as a hierarchical construct, second model; (3) SWB as a causal system, third model; (4) SWB as a composite, fourth model; (5) SWB as a configuration of components, fifth model. Nonetheless, model 1 was utilized in the present study to conceptualize SWB. This model delineates separability of the components of SWB and has been studied by examining the predictors, causes or correlates of SWB (Busseri, 2014; Busseri & Sadava, 2011). For instance, literature examining the three components of SWB, have found that extraversion, social support, religiosity and spirituality were positively linked to PA and LS (e.g., Gallagher & Vella-Brodrick, 2008; Heller, Watson, & Ilies, 2006; Jackson & Bergeman, 2011; Lucas & Baird, 2004), whereas neuroticism has been found to be typically related to NA (Lü, Wang, Liu & Zhang, 2014).

Despite the proliferation of research using the first model, Busseri and Sadava (2011) and Busseri (2014) have noted some criticism against model 1: failure of the separate component model to be described as a psychological construct in the standard psychometric sense and unclarity about how to deconstruct the relationship amongst LS, PA and NA.

Top-down and bottom-up theories of SWB (Diener, 1984).

Subjective well-being characterizes the degree of well-being individuals enjoy accompanying the subjective appraisal of their lives (Diener & Ryan, 2009). The top-down and bottom-up theories has been used to explain the nature and determinants SWB. According to the bottom-up theories by simply summing up positive or negative experiences in life context such as education, work, marriage and family, an individual may generally develop a sense of SWB (Feist, Bodner, Jacobs, Miles & Tan, 1995). This means that, a person may experience higher well-being from having many happy moments in specific life domains. The Lockean philosophical notion that "nothing is in the mind except what was first in the senses" (Locke, as cited in Feist et al., 1995) underpins this theory. Based on this philosophy, objective life events are the primary determining factors of SWB.

On the contrary top-down theories assume that individuals are inherently predisposed to live through and respond to events either positively or negatively (Brief, Butcher, George & Link, 1993). Therefore, a person with a more positive mindset may interpret a specific event as satisfactory than a person with a more negative outlook might, making the positive appraisal instead of the objective events the determining factor of well-being. Similarly, the top-down theory is influenced by Immanuel Kant's philosophy which states that the mind is an active interpreter of sensory information and that knowledge can be devoid of empirical experiences. The philosophy implies that predispositions such as beliefs and attitudes rather than objective life experiences are determinants of SWB. These theories provide an explanation of how factors like social support and spirituality may contribute to the SWB of parents. Irrespective of their divergent assumptions, some researchers nonetheless suggest that to holistically understand SWB both theories should be considered together not separately (e.g., Brief et al., 1993; Feist et al. 1995). Despite the benefits both theories offer to the present research, it cannot be extended to

explaining how resilience mediates the relationship between predictor variables of social support as well as spiritualty and the outcome variable of SWB.

Resilience theory (Rutter, 1985).

Resilience theory offers explanation on how social support and spirituality through resilience can improve the well-being of parents. The construct of resilience has witnessed an expansive growth in literature since its introduction in the 1970s and has become relevant to the branch of positive psychology (Yates, Tyrell & Masten, 2015). Masten (2014a) delineates resilience as the dynamic capability of a person to successfully adapt despite threats to their viability, functioning or development. It has also been delineated as "a dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar, Cicchetti & Becker, 2000, p. 545). Accordingly, the theory of resilience is concerned with the processes or strengths individuals demonstrate to survive negative life experiences.

In general, resilience theory posits that the presence of one or several protective factors can mitigate the consequences of exposure to adversity thereby fostering resilience and consequently enhancing positive outcomes (Rutter, 1985). The vast availability of protective factors or resources means greater experience of resilience. Rutter (1985; 2006) indicates that research in resilience prominently features protective and risk factors, and a balance of these factors enables resilience. Protective factors are those that foster resilience by decreasing the negative impacts of adversities. Examples of protective factors among families having a special child are social support, locus of control, optimism, religious beliefs and spirituality, cognitive appraisal and hope (Bekhet et al., 2012). Risk factors on the other hand, exposes individuals to mental and physical problems; examples among families include, child behavioural problems, symptom severity, anger, marital discord and financial troubles. It can therefore be opined that

when associated risk factors expose Ghanaian parents of children with special needs to dire consequences like mental or physical problems, the presence of sufficient protective factors in effect opposes these negative experiences by allowing parents to develop resilience leading to positive adaptations.

Review of Related Literature

There has been a steady increase in literature investigating well-being outcomes of parents caring for children with special needs over the past years. Many of the studies have focus on "negative consequences" of parents including, distress, anxiety, depression, marital discord and financial challenges among others (Dave et al., 2017; Davis & Carter, 2008; Herring et al., 2006). Others have shifted the focus onto positive outcomes namely psychological well-being, quality of life and life satisfaction (Khanna et al., 2011; Kim, Greenberg, Seltzer, & Krauss, 2003; Shivers, Leonczyk & Dykens, 2016). A growing number has also reported risk and protective factors associated with parent's well-being outcomes (Banga & Ghosh, 2017; Benson, 2006; Ekas, Lickenbrock & Whitman, 2010). Revelations from this accumulating empirical evidence suggest that raising a child with special needs comes with exceptional responsibilities and caregivers or parents bearing these responsibilities are liable to a lifetime of tremendous burden. However, with the presence of protective factors, caregivers or parents have a chance to experience positive outcomes.

The present study therefore reviewed previous research on two of these protective factors in relation to the well-being of Ghanaian parents. The review first reported the relationship between social support and well-being of parents. Next, it examined how spirituality has been linked to the well-being of parents. Finally, the last section reviewed the potential role of resilience in the association between social support, spirituality and well-being.

Relationship between Social support and well-being.

Social support, a critical resource, is known to cushion the impact of stressors and contribute to well-being. This resource is particularly important in a collectivist or interdependent country like Ghana because it is inordinately available and easily accessible (Adams & Dzokoto, 2003). Research on well-being of parents of children with special needs impacted by social support have been explored.

Ekas et al. (2010) examined the relationship between social support (i.e., support from partner, family, and friends), optimism and well-being among 119 mothers of children with ASD living in the USA. Well-being was assessed by measures of negative outcomes (e.g., depression, stress and negative affect) and positive outcomes (e.g., psychological well-being, positive affect, life satisfaction). Using Pearson correlation in their initial analysis, the researchers found that social support was linked to lower levels of depression, negative affect, and parenting stress. Regarding the positive outcomes, support received from friends was related to high levels of psychological well-being, life satisfaction and positive affect, while partner support was linked to high psychological well-being and life satisfaction. Lastly, social support received from other family members was solely associated with higher psychological well-being. Essentially, social support was associated with greater positive maternal outcomes and decreased negative maternal outcomes. Additionally, optimism was found to relate positively to positive well-being outcomes and negative to negative well-being outcomes.

Lu et al. (2015) also found evidence that life satisfaction was significantly predicted by social support and self-esteem of both 118 Chinese parents of children with ASD and 122 parents of normally developing children. The results from hierarchical multiple regressions also indicated that social support contributed more to the variance in life satisfaction than self-esteem

both parents after holding some socio-demographic variables constant. This finding speaks to the relevance of social support in the life satisfaction of parents of children with special healthcare needs.

Another study conducted in Israel investigated the resources that influenced the happiness of 191 mothers of children with disabilities including ASD, intellectual disability, cerebral palsy and hearing impairment. The researchers, Findler et al. (2016), were particularly interested in how attachment, stress, social support and guilt contributed to the happiness of these mothers. Using a hierarchical regression analysis, it was revealed that, attachment, stress, social support and guilt contributed significantly to happiness levels. In more details, lower levels of guilt, lower levels of anxiety and attachment avoidance, lower levels of general stress and greater levels of social support were related with higher levels of happiness.

Halstead, Griffith and Hastings (2017) investigated well-being as a function of perceived social support, positive perceptions and coping style of the of 138 UK mothers of children aged between 4 and 18 years old with intellectual and developmental disorders. Subjecting the data to PROCESS moderation analyses, the researchers found that only social support among the other protective factors moderated the association between child emotional and behavioural problems and maternal well-being outcomes (i.e., depression, life satisfaction, and positive affect). The finding showed that social support protected mothers from the challenges posed by children's behavioural and emotional problems.

The correlation between parenting stress, social support and life satisfaction was tested among 479 Chinese genitors of children with ASD aged 3 to 18 (Lu, Wang, Lei, Shi, Zhu & Jiang, 2018). Aside this aim, the researchers were also interested in finding out whether social support could moderate or mediate the link between stress and life satisfaction. Correlational

results indicated that parenting stress related negatively to life satisfaction and social support related positively to life satisfaction. In that, increases in stress led to reductions in life satisfaction and increases in social support led to increases in life satisfaction respectively. Moreover, social support was found to partially mediate and moderate the relationship between stress and life satisfaction. Thus, the findings highlighted the enhancing capability of social support in reducing the negative effect of parenting stress on life satisfaction.

Research has also shown that it is not only receiving or perceiving social support that is relevant to well-being, but the types or sources of social support is also important. For sources, evidence points to the relevance of informal support more than formal support in cushioning the dire effects of having a child with special needs (Boyd, 2002).

A study by Duvdevany and Abboud (2003) examined the influence of formal and informal social support on stress and well-being of Israeli Arab mothers of children with intellectual disabilities who frequently or rarely used government support. The researchers found that informal support had a negative influence on marital and financial stress, whereas formal support did not after controlling for mothers' characteristics (i.e., level of education and number of children). Social support, specifically informal support was also found to be positively predict maternal well-being. Results showed the relative importance of informal support (received from friends, family members or neighbours) over and above formal support received from the government and service providers. White and Hastings (2004) also found that informal support perceived from spouse, family members and friends rather than formal support perceived from professionals and service providers was significantly related to the well-being of 33 parents of adolescent children with intellectual disabilities. Similarly, Taub and Werner (2016) investigated the contribution of family, social, and governmental service support on the family quality of life

(FQOL) of both secular and religious Jewish families of children with developmental disability in Israel. They researchers found that while only social support contributed to the FQOL of secular families, familial support ahead of social contributed to the FQOL of religious families. However, support from government services was not related to the FQOL of both families, so was not entered into the regression models.

In a longitudinal study, Smith, Greenberg and Seltzer (2012) examined the effect of social support on the psychological well-being of American mothers of adolescents and adults with ASD numbering 269. The researchers wanted to precisely examine whether quantity of support (number of members in social network) and valence of support (positive support and negative support) were associated with maternal well-being (depression, positive affect and negative affect) over 18 months period. They found that the size of network members was associated with declining levels of depression as well as increasing levels of positive affect after18 months. For valence of social support only negative valence was a predictor of well-being; parent reporting greater negative support was linked with increasing amounts of depressive symptoms and negative affect as well as declining levels of positive affect. The researchers concluded that social support was an important resource in reducing depressive symptoms and negative affect as well as increasing positive affect. Moreover, having less non-judgemental and overbearing network members is more helpful for the well-being of mothers than having network members who provide positive support.

Considering the literature reviewed, it seems safe to conclude that social support is a relevant source to the well-being of parents of children with special needs. However, other studies (e.g., Gallagher & Whiteley, 2013; Smith & Grzywacz, 2014) have found no such relevance. For example, Gallagher and Whiteley (2013) examined whether social support could

moderate the relationship between stress and physical health of 70 parents of children with intellectual disabilities in Ireland. The researchers found that social support was neither a predictor of physical health nor a significant moderator. Suggesting that social support was not a significant resource for health.

Relationship between Spirituality and well-being.

Spirituality is another closely related protective resource which is typically used in the Ghanaian context. In Ghana, it is estimated that over 90% of individuals are affiliated to a religion (GSS, 2012), illustrating how much Ghanaians are religious and spiritual. Spirituality as a protective factor to the well-being of parents of children with special needs is well documented.

For example, Poston and Turnbull (2004) conducted a qualitative study to investigate the contribution of spirituality as well as religious beliefs and practices in family quality of life (FQOL) of American families having children with disabilities. The themes that emerged suggested that families gained strength from faith and activities provided by spirituality and religious engagement to help them sail through the challenges they faced in caring for their children with disabilities. They arrived at this conclusion by employing a participatory action research which involved conducting individual interviews and focus groups with family members and professionals. This result corroborates the findings of White (2009), who found that religiosity was positively related to the well-being of American parents of children with ASD and the acceptance of the disorders of their children. Thus, parents having stronger religious beliefs and engaged in more religious activities had greater well-being and were more accepting of their child's disorder. Taub and Werner (2016) also found similar results. Their results from a hierarchical regression revealed that among their religious participants and not the secular ones, spirituality was a critical factor in predicting their FQOL. The results suggested that

spirituality among these families served as a source of finding meaning for having a child with disability, develop a positive outlook and ultimately manage their distress.

Ekas, Whitman and Shivers (2009) studied whether and how religious beliefs, religious activities, and spirituality were related to both negative (child related stress, parenting stress, parenting affect, negative affect, depression and negative life events) and positive (child related enjoyment, self-esteem, life satisfaction, positive life events, positive affect, psychological well-being, optimism, control of internal states, sense of control) socioemotional functioning of mothers of children with ASD. The researchers sampled 119 mothers of children with ASD aged less than 18 years in the USA. From correlational analyses, they found that religious beliefs and spirituality were related in some ways to both negative and positive socioemotional functioning, with religious activities related to only the negative functioning. Furthermore, regression results of the negative functioning revealed that religious beliefs predicted only maternal depression, whereas spirituality predicted only parenting affect. It was revealed from the regression results of the positive functioning that spirituality predicted life satisfaction, positive affect, well-being, self-esteem and control of internal states whilst religious beliefs predicted only self-esteem and optimism. Concerning the two factors, spirituality contributed more to positive outcomes. Religious activities on the contrary were related to more negative outcomes and lower levels of positive outcomes. In that, it positively predicted parenting stress, parenting affect, and depression and negatively predicted self-esteem, positive affect, well-being, and control of internal states. This study spoke to the intricacies between religiosity and spirituality and their relationship with the functioning of mothers of children with ASD. Again, it attested to the importance of spirituality to the functioning of parents.

Spirituality was also examined as a moderator variable, given its significance in ameliorating the severity of stress. Oti-Boadi (2015) examined—in the quantitative phase of the study—how spirituality moderated the relationship between stress and depression as well as anxiety among 160 primary caregivers of children with disabilities in Ghana. The researcher found that spirituality moderated the relationship between stress and anxiety but not depression. This meant that with high levels of spirituality the effects of stress on the potential experience of symptoms of anxiety is reduced, however low levels of spirituality meant high levels of anxiety among primary caregivers. This essentially meant that spiritualty was a beneficial protective factor for the well-being of caregivers.

Aside its benefits to the well-being of parents, spirituality has also been found to be relevant to the marital satisfaction of parents. A study by Parker, Mandleco, Roper, Freeborn, and Dyches (2011) examined the association between religiosity, spirituality, marital conflict and satisfaction of parents raising children with disabilities and parents raising typically developing children in USA. The researchers sampled 111 couples raising a child with disabilities and 34 couples raising typically developing children to fulfil this purpose. From correlational analyses, it was found that, spirituality and religiosity for mothers was positively related to marital satisfaction and negatively related to marital conflict. For fathers, spirituality and religiosity were only related, positively, to marital satisfaction but not marital conflict. Mothers' spirituality predicted their marital conflict, suggesting that higher levels of spirituality meant having lower conflict in their marriage. But this wasn't the case for fathers. Higher spirituality was also associated with higher ratings of marital satisfaction for both mothers and fathers. Allen and Marshall (2010) also found that spirituality was used as a coping resource by Africa American parents of children who were chronically ill. Zhang and Rusch's (2005) systematic review of

literature revealed that parents relied on spirituality for three reasons: (1) provide meaning for having a child with disability, (2) gain inner strength and peace through the tremendous journey of raising a child with disabilities, and (3) transformed them to become a better and more virtuous individuals.

However, spirituality has not always been found to be a source of wellbeing or mitigate the stresses of parents. For instance, Gallagher, Philips, Lee, and Carroll (2014) found that spirituality positively predicted depression of 32 parents raising children with developmental disabilities, indicating that increasing levels were associated with increasing experience of depression. Hastings et al. (2005) also found that among 26 mothers and 20 fathers of school-age children with autism religious coping was positively related to maternal depression and positively related to both paternal anxiety and depression. Hastings, Allen, McDermott and Still (2002) also found that seeking spiritual support was not predictive of positive perceptions (e.g., happiness and fulfilment, personal growth and maturity) of mothers raising children with intellectual disabilities.

Social support, Spirituality and Well-being: the role of resilience.

The previous sections described the main effect or relationship between social support, spirituality and well-being; despite other findings to the contrary. These contrary evidences nevertheless suggest there may be other potential mechanism that could explain the main effect or relationship between social support, spirituality and well-being. Resilience is therefore proposed to be one of these mechanisms. The importance of protective factors such as social support and spirituality in engendering resilience among individuals who are exposed to stressful events have been well documented (Manning, 2013; Raftopoulos & Bates, 2011; Swanson, Geller, DeMartini, Fernandez & Fehon, 2018; Wilks & Spivey, 2010). Evidence of this

relationship in families of children with special needs has also been established. For example, Bayat (2007) examined the factors or processes of resilience in 175 American parents and other primary caregivers of a child with ASD, aged between 2 and 18 years. To achieve this, the researcher performed a content analysis of written responses to three open-ended questions. The researcher found that "making positive meaning of disability, mobilization of resources, becoming united and closer as a family and gaining spiritual strength" were indicative of resilience among these families (p. 702). The researcher concluded that, when any of these factors are available, families may be able to overcome the challenges of caring for a member with ASD and enjoy a positive well-being. Ruiz-Robledillo et al. (2014) also found that higher scores on social support was related to higher levels of resilience among 67 parents of children diagnosed with ASD in Spain. In more details, types of social support (emotional, tangible, positive social support and the total social support) were positively linked to resilience. In addition, Pandya (2018) investigated the impact of spirituality and spiritually-infused-training on resilience in primary parents of children with autism spectrum disorders (ASD). Using a pre- and post-test-based experimental design, a 6-days tailored spiritual lessons package was administered to 1,687 parents of children with ASD across 15 countries. The results revealed that spirituality (both spiritual programme sessions and self-practiced) contributed significantly to post-test scores of resilience with self-practice making the highest contribution. Spirituality in essence was shown to be a significant promotor of resilience among parents of children with special needs.

Along this line, proponents of resilience have espoused that highly resilient individuals experience increased levels of well-being and reduced levels of stress (Peer & Hillman, 2014). This suggestion is further supported in a recent study by Halstead et al. (2018) in which

resilience was investigated in relation to the well-being outcomes of mothers of children with ASD and other developmental disabilities. To achieve this the authors conducted two separate studies to investigate resilience in mothers of children with DD resident in the UK and mothers of children with ASD in the USA. In the first study which was among the 312 mothers residing in the UK, it was found that both maternal positive and negative well-being outcomes (i.e., stress, anxiety, depression, family satisfaction and positive perceptions) was significantly predicted by maternal resilience. The cross-sectional results of the second study which was among 136 mothers living in the USA also indicated that maternal resilience significantly influenced maternal depression, anxiety, loneliness and family cohesion but not benefit finding. The researchers concluded that greater levels of resilience were associated with better well-being and reduced negative consequences. These finding lend support to the relationship between resilience and well-being of parents of children with special needs. Bitsika et al. (2013) also tested the buffering effects of resilience against the experience of anxiety and depression as a function of daily parental stress linked to caring for a child with ASD. Data was collected from 73 and 35 Australian mothers and fathers raising children with ASD respectively. It was determined from moderation analysis that resilience buffered against the levels of anxiety and depression experienced by these parents from the daily stressors of caring for their children. The researchers concluded that developing resilience through training or counselling may signify a means of helping these parents maintain some psychological equilibrium. Similarly, Rosenberg et al. (2014) showed that for the 96 American parents of children with cancer sampled for their study, a decrease in levels of resilience was associated with increased psychological distress, lower family cohesion and adaptability. In other words, resilience is a great source of increasing positive outcomes and decreasing negative consequences.

Taken together, these studies suggest that resilience may be a potential mechanism through which social support and spirituality exert their influence on the well-being of parents of children with special needs.

Previous researches among parents of children with special needs that have considered resilience as a mediating variable of the relationship between other predictor variables and well-being related outcome variables have found it to be significant. For instance, Migerode, Maes, Buysse and Brondeel (2012) investigated as part of their aims whether resilience mediated the relationship between Belgian parent's pile-up of demands (adaptive skills and impact of disability) from having an adolescent with a disability and quality of life (QOL). To achieve their aim the researchers collected survey data from 90 mothers and 42 fathers of adolescents with different types of disabilities and analysed the data using structural equation modelling. The researchers found that only the perceived impact of child's disability was significantly related to resilience, which was subsequently associated to QOL. This finding showed that resilience was a relevant mechanism that explained the relationship between impact of disability on the quality of life of parents. In another study, Ginevra et al. (2017) examined the relationship between career adaptability and life satisfaction mediated by the resilience of 152 Italian parents of 147 children with mild intellectual disability using a life design approach. The researchers' analyses with structural equation model revealed that career adaptability was indirectly related to life satisfaction through resilience; proving that resilience was a mediator between the career adaptability and life satisfaction.

Moreover, research with other populations have found resilience to mediate the relationship between protective factors and well-being. Lü, Wang, Liu and Zhang (2014) for example investigated the impact of extraversion and neuroticism on happiness, PA and NA; as

well as the indirect effect of resilience between this relationship. The authors collected data from 289 Chinese undergraduate students and subjected the data to structural equation modelling. Result from the analyses showed that both extraversion and neuroticism exerted their influence on happiness, PA and NA through resilience. In another related study, Bajaj and Tande (2016) also found evidence of resilience mediating the relationship between mindfulness and the indices of SWB (i.e., LS, PA and NA) of 327 Indian undergraduate students.

Evidence from these studies therefore show that resilience is a significant third variable or mediator. This evidence further lends credence to the potentiality of resilience mediating the relationship between social support and SWB as well as spirituality and SWB.

Rationale of Study

Positive psychology strives to promote positive well-being. Considering this, one of its mandates is to build a science that supports families so that they can create a positive atmosphere for their children to flourish and develop (Linley, Joseph, Harrington & Wood, 2006). Globally, majority of research conducted among parents of special needs children have concentrated on negative psychological symptoms such as depression, stress and anxiety. Ghanaian researches have also focused on the "negative" aspects in disregard to the positive. Creating an impression where raising a child with special needs is generally viewed from a negative lens thus defeating the whole purpose of positive psychology. Overemphasis on the dire repercussions of raising a child with special needs does not only affect the families, but it also goes to reinforce social stereotypes and stigma. On the contrary some parents have described the benefit of having a child with special needs as fulfilling: giving meaning and purpose to their lives (Huiracocha et al., 2017). They have also demonstrated resilience by overcoming associated burdens of caring

for a special child. In this regard, the current research adopted a more positive outlook by studying the subjective well-being and resilience and factors that influences them.

Ghana like many other African countries has been described as a collectivistic or interdependent country (Adams & Dzokoto, 2003; Wiredu & Gyekye, 1992). What this simply implies is that, people are closely connected to one another and as it stands social support is available in times of hardship and burdens. Another protective resource that is frequently mentioned in literature is spirituality. Spirituality is diffused into every fabric of functioning and in times of burden Ghanaians often turn to the "Almighty" for solace. For this reason, a well noted African philosopher once wrote "Africans are notoriously religious" (Mbiti, 1969, p. 1). Oti-Boadi (2017) has also anecdotally indicated the relevance of these protective factors to coping among mothers of children with ID in Ghana. It can therefore be said that social support and spirituality are resources that are essential to the subjective well-being of Ghanaian parents of children with special needs.

Although, the studies reviewed provide important information about parenting children with special needs, there is substantial gap regarding context. Majority of the literature were conducted in the context of developed countries with little in developing countries. This implies that available information excludes the unique experiences of parents in developing countries causing generalization problems. To address this paucity and advance research in developing countries like Ghana, this study examined the influence of social support, spirituality in the subjective well-being of parents of children with special needs and further examined the psychological process of resilience through which these protective factors exert their influence on SWB.

Statement of Hypotheses

The following hypotheses were constructed based on the literature reviewed.

1. Social support will significantly predict the subjective well-being of parents of children with special needs;

a. Social support will predict life satisfaction of parents of children with special needs.

b. Social support will predict positive affect of parents of children with special needs.

c. Social support will predict negative affect of parents of children with special needs.

2. Spirituality will significantly predict the subjective well-being of parents of children with special needs;

a. Spirituality will predict life satisfaction of parents of children with special needs.

b. Spirituality will predict positive affect of parents of children with special needs.

c. Spirituality will predict negative affect of parents of children with special needs.

3. Resilience will mediate the relationship between social support and subjective well-being of parents of children with special needs.

4. Resilience will mediate the relationship between spirituality and subjective well-being of parents of children with special needs.

Conceptual Model

In this model, social support and spirituality are hypothesized to be factors that predict Life satisfaction, Positive affect and Negative affect. Additionally, resilience is predicted to be a mediating variable between social support, spirituality and the components of SWB.

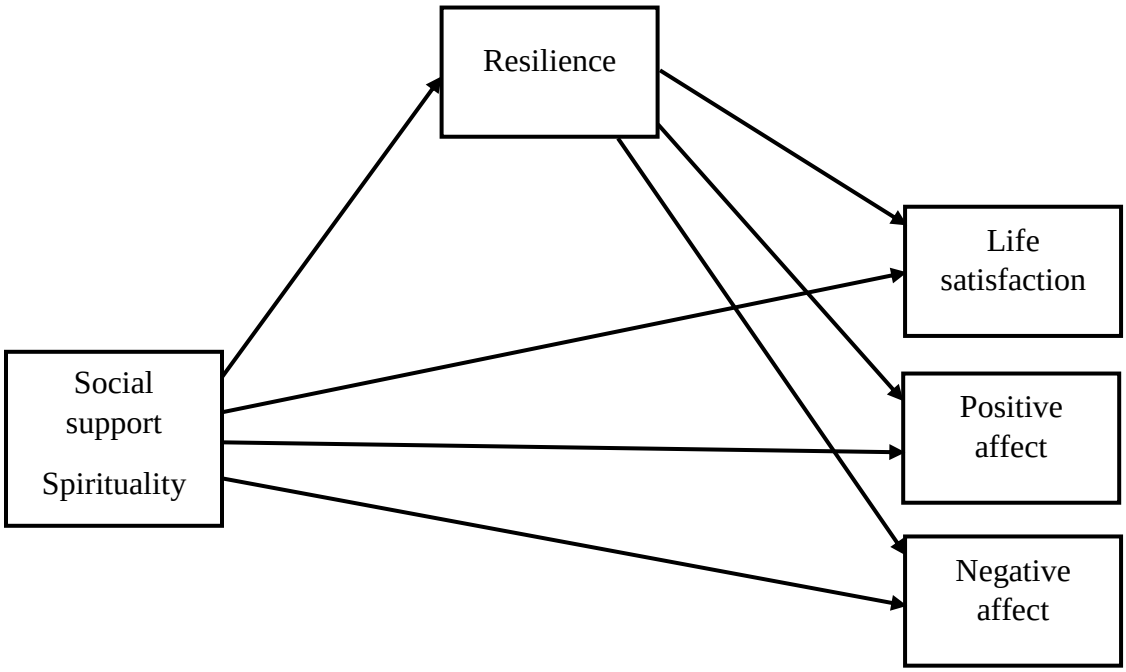

Figure 1. The conceptual model for the relationship between social support and spirituality through resilience on the components of SWB

Operational Definitions of Terms

Special child. Children between the ages of 0 and 18 years who have a developmental disability (e.g., Autism Spectrum disorder, Attention deficit hyperactivity disorder, Cerebral Palsy, Down's syndrome).

Parent. A biological father or mother of a child who has a special need with age ranging from 0 to 18 years.

Social support. Tangible or intangible resources that an individual perceives to be available to them by people in their informal networks. It was measured using the Multidimensional Scale of Perceived Social Support.

Spirituality. One's personal relationships or experiences, usually intrinsic, with a transcendental being, such as God or the Universe. Measured using Brief multidimensional measure of religiousness and spirituality (Daily Spiritual Experiences subscale).

Resilience. The capacity of or process with which an individual who possesses adequate protective resources overcomes adversities or stressors. It was measured using the Brief resilience scale.

Subjective well-being (SWB). Experience of high life satisfaction, incessant amount of positive emotions, and reduced levels of negative emotions. Measured with the Satisfaction with life scale and the Positive affect, negative affect schedule.

CHAPTER THREE

Methodology

The research methodology utilized to investigate the influence of social support, spirituality and resilience in the subjective well-being of parents of children with special needs is discussed in the present chapter. It contains the research design, research settings, population, sample size, sampling technique, the materials that were used to collect data, pilot study and procedure.

Research Design

The study was a correlational design, and standardized questionnaires were administered. According to Creswell (2012) a correlational research "provide[s] an opportunity for you to predict scores and explain the relationship among variables" (p. 338). Likewise, the study considered the intricate association between social support, resilience and spirituality in the SWB of parents. Even though this type of design fails to conclusively explain why there is a relationship between variables, it can however help collect large data of trends from a number of people at a specific time and further determine the relationship (strength and direction) between variables. Time and financial constraints also made the utilization of this design more appropriate than say, an experimental or longitudinal design. Juxtaposing these constraints with providing convenience for extremely busy research participants, both the online or internet survey (created with google forms) and the paper-and-pencil questionnaire were used. Aside convenience, online surveys has been suggested to be valid data collection method, particularly when samples are hard to reach face-to-face (Kraut et al., 2004)

Research Settings

The present research was conducted in Accra, the capital city of Ghana. As a cosmopolitan city, Accra accommodates people from all walks of life (i.e., people from different cultural backgrounds, religious affiliations and from other parts of the country) making it a suitable research setting. The population of the study—Ghanaian mothers and fathers of children with special needs—was accessible via the special schools their children attended and two parents' support and advocacy groups. The schools from which data was collected are as follows: Multikids Inclusive Academy, HopeSetters Autism Center, New Horizon Special School, Silver Peak Academy and Epicentre special school. These schools which are scattered across the capital admit and provide educational and therapeutic needs for children with all types of developmental disorders and of varying ages. Before admitting a student, these schools usually require formal diagnoses, therefore a greater number of admitted children have been diagnosed by a professional such as a clinical psychologist or a medical practitioner. The two groups contacted were "With God Cerebral Palsy" and "Special mothers' project". Both groups were created to provide a supporting environment for parents raising children with special needs, particularly cerebral palsy, and advocate for equal opportunities for their children.

Population

The population of the study was Ghanaian biological mothers and fathers of special needs children in the Accra Metropolis. UNICEF (2013) defines children with disabilities to be between the ages of 0 to 18. Therefore, mothers and fathers who have children with special needs, falling under this age bracket were the participants of this study. As has already been indicated, there are close to 200,000 young children between the ages of 0-19 with varying disabilities in Ghana (GSS, 2013); it then could be inferred that there are over 200,000 parents of

these children in Ghana. In more specific details, close to 22,866 of these children live in Accra, bringing down the total number of parents to over 23, 000 as of 2010 (GSS, 2013). Nevertheless, this population may be described as hard-to-reach, so accessible through the special schools where their children attend or support group to which they may belong.

Sample

The research sample size was determined by using G*Power 3.1.9.2 (Faul, Erdfelder & Buchner, 2007). It is an easy-to-use computer program designed to enable social and behavioral researchers to easily conduct power analysis for statistical tests. To generate the sample required for the study, an a priori power analysis based on Cohen's (1988; 1992) acceptable power of .80, an alpha of 0.05 and a medium effect size of 0.15 was conducted. Outcome of the analysis estimated a required number of 103 participants as sufficient to accept the alternative hypotheses over the null hypotheses. One hundred and seven (107) parents were eventually included as the final sample for the study after excluding 3 parents for failing to meet the inclusion criteria (e.g., their child was over 18 [see Table 2 in results chapter for detailed demographic characteristics]).

Sampling Technique

Parents were recruited using the purposive and snowballing sampling techniques—which are types of non-probability sampling. The purposive sampling technique guarantees that research participants are recruited based on distinguishable features that is suitable and measured in a study (Cozby, 2009). This technique was used because, the participants were of interest to the study and only accessible through the special schools where data collection was conducted. These participants also acted as a springboard for access to their partners and where possible, other parents with children with special needs. In that case, using the snowballing technique was

more suitable. This technique granted the researcher the opportunity to ask willing participants to recruit other participants who shared similar characteristics (Howitt & Cramer, 2011).

Inclusion and Exclusion Criteria

Ghanaian biological mothers and fathers raising children with special needs aged between 0-18, who resided in Accra were included in the research. Conversely, genitors who were not Ghanaians and those who had children falling outside the age bracket were excluded from the study.

Materials/Instruments

Demographic questionnaires.

A demographic questionnaire was included in the instrumentation (both the online created with google form and a paper-and-pencil format) of the study to obtain relevant characteristics data about parents and their children. Parent details included age, gender, religion, socioeconomic indexes (e.g., educational level, employment and income) and marital status. That of children included age, gender, diagnoses or type of disorder and whether special child had access to therapy. A back-translation method, to ensure reliability, was used to translate the instrument into Akan. It was translated by a professional and back translated into English by two postgraduate colleagues.

Satisfaction with life scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).

The satisfaction with life scale is concise, a scale that comprises 5-items and created to evaluate an individual's perception of life contentment. The scale together with PANAS are conceptualized to measure one's subjective well-being (Satici, 2016). It is a self-rating instrument on 7-points Likert scale. On the scale, 1 corresponds to "strongly disagree" and 7 for "strongly agree". Diener et al. (1985) describe it as a unidimensional scale. Some items on the

scale include, “In most ways my life is close to my ideal” and “So far I have gotten the important things I want in life”. The scale is summed up by combining all the items and scores between 30-35 indicate highly satisfied and low scores between 5-9 indicate extremely dissatisfied. A recent study by Extremera and Rey (2016) demonstrated a sound alpha coefficient of .84. For the present study, a Cronbach alpha of .80 was found.

The brief resilience Scale (BRS; Smith et al., 2008).

The BRS was created to estimate an individual’s capability to bounce back from or overcome adversity (Smith, et al., 2008). It consists of three items which are phrased positively (e.g., “I usually come through difficult times with little trouble” [Smith et al., 2008, p. 196]) and three items phrased negatively (e.g., “It is hard for me to snap back when something bad happens” [Smith et al., 2008, p. 196]). It is a 6-item scale, rated on a 5-point Likert, where 1 represents strongly disagree to 5 representing strongly agree. Total scores are obtained by adding up all responses for all 6 items, which range within 6 to 30. Higher scores are associated with high resilience while lower scores on the scale represents low resilience. Bariola et al. (2015) reported a good internal consistency coefficient of 0.92 from their research. A Cronbach alpha of .74 was found in the present study.

Positive affect, negative affect schedule (PANAS; Watson, Clark & Tellegen, 1988).

The Positive affect-and-Negative affect schedule is one popular instrument used to measure emotions or mood state. The scale is a self-report consisting of 20-item, 10 for each subscale namely positive affect and negative affect. Participants are usually asked to respond by indicating how they feel for a given period across a 5-point Likert-type scale. Examples of the scale points include, 1 for “very slightly or not at all” and 5 for “very much”. This scale together with SWLS were used to assess a person’s subjective well-being. It is a simple scale with

examples of items as follows: interested and excited, for the positive affect; irritable and ashamed, for the negative affect. Users are usually required to indicate how they feel at certain timeframes. For this study, the "General" timeframe was used. Extremera and Rey (2016) reported sound reliabilities of 0.83 for positive affect scale and 0.85 for negative affect scale. This scale had a Cronbach alpha reliability of .69 and .80 for positive and negative schedule respectively in this study.

Multidimensional scale of perceived social support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988).

The Multi-Dimensional Scale of Perceived Social Support (MSPSS) contains of 12 items that determines how much support an individual perceives from close relations like family, friends and significant others. It is a self-rating scale measured on a 7-point Likert from 1 = "very strongly disagree" to 7 = "very strongly agree". The total scores can be summed as family, friends, significant others or total scale. The sum is ascertained when the 12-items are added, and the results divided by 12. Average scores interpreted as low perceive support fall between 1 and 2.9; scores regarded as moderate support range from 3 to 5; those ranging from 5.1 to 7 describe high perceive support. The scale has been reported with strong psychometric properties. Doku, Dotse and Mensah (2015) for instance reported accepted Cronbach coefficient alpha of .80 for family, .86 for friends, .91 for significant others, and .88 for the total scale. In this study, the Cronbach's alpha coefficient of the total scale was .88.

Brief multidimensional measure of religiousness and spirituality (BMMRS; Fetzer Institute, 1999).

The 40-item scale contains 12 subscales and measures different facets of religiousness and spirituality. However, only one subscale relevant to the study was used. The Daily Spiritual

Experiences subscale made up of six items, measures an individual's daily experience of and interaction with God. It was designed to assess the day-to-day spiritual experiences of people irrespective of their religion. It is measured with a 6-point response scale, where (1) is Many times a day and (6) is Never or almost never. In the current study, the scale was reverse scored, and a total score was calculated. The scale has shown very good psychometric properties. For example, Johnstone, Bhushan, Hanks, Yoon and Cohen (2016) reported good Cronbach Alpha, α = 0.94. In the present study, a Cronbach's alpha of .82 was found for the daily spiritual experience subscale.

Pilot Testing

A pilot study with a total of 37 parents of children with special needs to ascertain the reliability coefficients of the instruments used in the research was conducted. This number per the objectives of the present study is suggested to be adequate (Hertzog, 2008; Johanson & Brooks, 2010). The participants consisted of 10 fathers (27%) and 27 mothers (73%). The participants' age was between 23 to 57, (*M*=39.7.24, *SD*=8.2). The Satisfaction with life scale (SWLS) recorded a Cronbach alpha coefficient of .733. The Brief Resilience Scale (BRS) had a Cronbach alpha of .721. The Cronbach Alpha of the subscales of the Positive and Negative Affect Scale (PANAS) were, PA=.674; NA=.737. The reliability of the total Multidimensional Scale of Perceived Social Support (MSPSS) was .878. The Cronbach alpha of the Daily spiritual experience subscale of BMMRS was = .881.

Procedure

The main study began immediately after clearance was granted from the ethics committee for Humanities, University of Ghana and an introductory letter obtained from the Department of Psychology (see Appendix A). Copies of these requisite documents, introducing the research and

the researcher, were then sent to the special schools. Once these facilities granted permission to proceed, parents were approached for data collection. Before any parent would consent to participate, the details of the study including possible benefits and risk, and assurance of confidentiality, were thoroughly communicated to said parent. The parents were also informed that he or she had a choice to either participate or not with impunity. Upon agreeing to participate, a consent form was presented to endorse, and the questionnaire was made available for completion. Data was collected with both online (created with google form) or paper-and-pencil questionnaires; therefore, parents had to choose their preferred option. Those who chose the paper-and-pencil option but were unable to finish it within the presence of the researcher were given some days to return the completed survey to the administrator of the school to be collected by the researcher on a later day. For those who chose the online survey, a link was shared to either their emails or social media platform (specifically WhatsApp, which involved taking their phone contact).

Each participant also acted as a source to getting access to their partners; thus, every parent approached was questioned as to whether they could help recruit their partners, and an affirmative response, meant more than one questionnaire was given to said parent. For the parents belonging to the support groups, the researcher established contact with their administrators, joined their scheduled meetings and collected data from them. In addition to this method, a link of the online survey was posted to their WhatsApp group platform, which the researcher was invited to join. Interested participants thereafter connected to the survey via the link. Majority of parents could speak, read and understand English, indicative of their level of education in Table 2 (see Results), however only a few were non-fluent. For this few parents, data was collected using the Akan translated version of the research survey through the help of a

trained research assistant. Participation was strictly voluntary: parents did not receive any compensation. Surveys that were completed were concurrently prepared for data analyses.

CHAPTER FOUR

Results

The goal of the present study was to assess the influence of social support, spirituality and resilience in the subjective well-being of parents of children with special needs. In this regard, the IBM Statistical Package for Social Science (SPSS) version 23.0 was used to conduct the statistical analyses. This chapter therefore reports the findings of these analyses by providing tabulated and written evidence. The chapter follows a chronological order: preliminary analysis, descriptive analysis, hypothesis testing and summary.

Preliminary Analyses

The preliminary analyses began with inspecting the data for missing values. It was found that the missing data—missing because of non-report—was random and as suggested by Tabachnick and Fidel (2007) did not constitute any serious threat to further analysis. Therefore, "exclude cases pairwise" option was used to tackle missing data. Next, normality check was performed on the main continuous variables: social support and its subscale, spirituality, resilience, positive affect, negative affect and satisfaction with life. This meant calculating the skewness and kurtosis of the study variables to ensure that the each were within the accepted range of +1 and -1 (Field, 2013; Spiegel & Stephens, 2008). The means and standard deviation and Cronbach Alphas were also estimated (see Table 1). The main study variables except for Positive Affect had satisfactory Cronbach Alpha coefficient of ≥.70 (Pallant, 2016). Lastly, the demographic data was computed for frequencies, percentages, means and standard deviations (see Table 2).

Table 1

Psychometric properties of main study variables (N=107)

Variables	*n*	*No. of items*	*M*	*SD*	*α*	Skewness	Kurtosis
Subjective well-being							
Life satisfaction	103	5	21.25	6.72	.80	.02	-.33
Positive affect	105	10	36.24	6.49	.69	-.16	-.06
Negative affect	103	10	21.32	7.27	.80	.21	-.70
Resilience	107	6	21.47	4.21	.74	-.28	-.29
Social support	107	12	56.03	14.91	.88	-.49	-.51
Spirituality	107	6	30.81	3.87	.82	-.48	-.50

Note. α = Cronbach Alpha.

Descriptive Analyses

The final sample comprised of 107 parents of 104 children with special needs who responded to both online (Google form) and paper-and-pencil surveys. The participants who were recruited via the paper-and-pencil format numbered 51 (47.66%) whereas via the online format were 56 (52.34 %). There were 101 individual parents and 3 couples. Majority of the participants were mothers (74.8%), married (80.4%), affiliated to the Pentecostal/charismatic religion (47.7%), had monthly income between the ranges of ₵1,201-₵1,800 (20.6%), were either self-employed or entrepreneur (42.1%) and had attained Tertiary level education (46.7%). Participants' average age was 39.98 (*SD* = 8.06) years. Most parents had children with cerebral palsy (56.7%), most of the children were males (65.4%) and had access to some form of therapy (67.3%). The children's mean age was 9.05 (SD = 4.22) years. Table 2 contains a summary of the results.

Table 2

Parents and Special Child Demographic Characteristics

Characteristics	*n* (%)	*M (SD)*	Min–Max
Parents (*N*=107)			
Mothers	80 (74.8)		
Fathers	27 (25.2)		
Parents' age		39.98 (8.06)	23-58
Marital status			
Single	9 (8.4)		
Married	86 (80.4)		
Separated	9 (8.4)		
Divorced	1 (.9)		
Widowed	1 (.9)		
Missing	1 (.9)		
Religion			
None	3 (2.8)		
Protestant	24 (22.4)		
Pentecostal/Charismatic	51 (47.7)		
Catholic	14 (13.1)		
Muslim	9 (8.4)		
Other	5 (4.7)		
Missing	1 (.9)		
Household monthly Income			
₵ 0-600	20 (18.7)		
₵ 601-1,200	20 (18.7)		
₵ 1,201-1,800	22 (20.6)		
₵ 1,801-2,400	11 (10.3)		
₵ 2,401-3,000	14 (13.1)		
₵ 3,001-above	17 (15.9)		
Missing	3 (2.8)		
Employment			
Not employed	26 (24.3)		
Private institution	14 (13.1)		
Government institution	17 (15.9)		
Self-employed/entrepreneur	45 (42.1)		
Other	2 (1.9)		
Missing	3 (2.8)		
Education			
Basic school	8 (7.5)		

Secondary/technical/vocational	25 (23.4)		
Tertiary	50 (46.7)		
Postgraduate	19 (17.8)		
Missing	5 (4.7)		
Special Child (*N* = 104)			
Gender			
Male	68 (65.4)		
Female	36 (34.6)		
Child's age		9.05 (4.22)	3-18
Child diagnosis			
Cerebral Palsy	59 (56.7)		
Autism Spectrum disorder	21 (20.2)		
Down Syndrome	8 (7.7)		
Attention Deficit Hyperactivity disorder	8 (7.7)		
Dyslexia	3 (2.9)		
Dual diagnosis	2 (1.9)		
Other	3 (2.9)		
Does child have access to therapy			
Yes	70 (67.3)		
No	32 (30.8)		
Missing	2 (1.9)		

Note. Parents' age (*n* = 105); Children's age (*n* = 103)

Hypothesis Testing

Four main hypotheses per the research objectives were tested in this study, with the three indices of SWB (life satisfaction, positive affect and Negative affect) as the outcome variables, social support and spirituality as predictors, resilience as a mediator and demographics as covariates. The first two hypotheses were tested simultaneously in three separate hierarchical multiple regression analyses per dependent variable. It was used in a bid to assess the unique contributions of social support and spirituality on the three components of SWB while controlling the potential influence of some demographic variables. The order of entering variables was the same for each analysis. To decide which demographic variables to include as covariates for the regression, a Pearson product-moment correlation was conducted (see

Appendix C). It was found that some of the demographic variables were related to at least one outcome variable. For instance, parent's gender was related to both Life satisfaction and negative affect while the special child's diagnosis was related to life satisfaction, positive affect and negative affect (see Table 3). A categorical variable was dummy coded for the analyses. The special child's diagnosis was coded with reference to the majority, that is, Cerebral Palsy. It was recoded as 0, and all other diagnoses as 1.

The third and fourth hypotheses was tested using the PROCESS macro version 2.16.3 created by Hayes (2012) rather than the influential causal step approach by Baron and Kenney (1986). PROCESS is a computational tool designed to easily examine moderation, mediation and conditional process modelling. Hayes (2013) has revealed that Baron and Kenney's causal approach is flawed "both statistically and philosophically" (p. 167). According to him, the causal approach lacks sufficient power to detect an indirect effect since deciding a variable as a mediator is contingent on meeting three prerequisite assumptions and failure to meet significance on any of these meant abandoning the model (Hayes, 2013). In accordance to Hayes (2009), bootstrapping was set at 5,000 bootstrap samples to ensure a more valid and robust testing procedure for mediating effects in the present study. As an inbuilt deletion method, the listwise was used. Prior to using these statistical tests, assumptions such as linearity, normality, multicollinearity and singularity were checked, and none were significantly violated.

Table 3

Pearson-Product Moment correlations between predictor, outcome and demographic variables

Variables	1	2	3	4	5	6	7	8	9	10
1. Life Satisfaction	—									
2. Positive Affect	.34**	—								
3. Negative Affect	-.37**	-.43**	—							
4. Resilience	.48**	.44**	-.45**	—						
5. Spirituality	.15	.25**	-.22*	.31**	—					
6. Social Support	.37**	.06	-.18	.40**	-.11	—				
7. Parents' Gender	-.39**	-.06	.21*	-.12	-.01	-.04	—			
8. Parents' Age	.23*	.14	-.03	.01	.14	.01	-.27**	—		
9. Child's Gender	-.12	-.22*	-.12	.03	.20*	-.02	.16	-.22*	—	
10. Child's Diagnosis	-.23*	-.28**	.20*	-.14	-.05	-.03	.15	-.22*	.23*	—

Note. *p < .05; **p < .01. *n = 99-107*

Hypothesis one.

The first hypothesis states that social support will significantly influence all three indices of SWB: (1) social support will predict life satisfaction, (2) social support will predict positive affect, and (3) social support will predict negative affect and doing this while controlling for some demographic variables. To test this subset of hypotheses, a hierarchical regression was used. The special child's demographic—gender and diagnosis—variables were entered in the first model, followed by the parents' demographics—gender and age—which was entered in the second block. The aim was to control their effects before entering the main predictors into the last block. This procedure was repeated for all three components of SWB as outcome variables.

The results from the regression (see Table 4) revealed that the first model in Life satisfaction (LS) having the children characteristics as predictors was significant F (2, 98) = 3.21, p = .045; R^2 =.06, with child's diagnosis (β = .22, p = .027) making significant contribution while special child's gender was not a significant contributor (β = -.08, p = .434). Model 2 which included parents' variables and controlled for the effects of the children's variable was similarly

significant, $\Delta R^2 = .14$, F (4, 96) = 5.93, $p < .001$ with only parent's gender ($\beta = -.40$, $p < .001$) explaining statistically significant amount of variance in life satisfaction whereas the others were not significant contributors. The last model and the one of interest to the researcher's hypothesis, was also found to be significant, $\Delta R^2 = .14$, F (6, 94) = 8.16, $p < .001$. Social support after controlling for the demographics was a significant predictor of life satisfaction and accounted for a unique variance in Life satisfaction ($\beta = -.36$, p < .001, Part $R^2 = .13$). This goes to confirm the hypothesis that social support will contribute significantly to the Life satisfaction of parents of children with special needs.

In the model 1 when positive affect was considered as an outcome variable, child's diagnosis ($\beta = .26$, $p = .007$) was the only significant predictor, accounting for a significant variance in the model; $R^2 = .11$, F (2, 100) = 6.38, $p = .002$. The second model was also significant $\Delta R^2 = .00$, F (4, 98) = 3.13, $p = .018$, however none of the variables entered were significant: parent's gender, ($\beta = -.01$, $p = .957$) and parent's age, ($\beta = .01$, $p = .899$). In the last model, a statistically significance was recorded, $\Delta R^2 = .07$, F (6, 96) = 3.69, $p = .002$. Although the model was significant, social support did not statistically predict of positive affect ($\beta = .07$, $p = .480$). Thus, the hypothesis that social support will predict positive affect was refuted.

When considering negative affect as an outcome variable, the first model, $R^2 = .02$, F (2, 98) = .95, $p = .389$ and the second model, $\Delta R^2 = .05$, F (4, 96) = 1.8, $p = .129$ were not significant; nevertheless, the last model ($\Delta R^2 = .07$, F [6, 94] = 2.63, $p = .021$) was significant when the main predictors were entered. Social support was found to contribute a significant variance in negative affect, ($\beta = -.20$, $p = .047$, Part $R^2 = .04$). This meant that the hypothesis which stated that social support will significant predict negative affect was accepted.

Table 4

Hierarchical regression of social support and spirituality as predictors of Life Satisfaction, Positive Affect and Negative Affect while controlling Demographic Variables

	Life satisfaction		Positive affect		Negative affect	
Model	*B* (SE B)	*β*	*B* (SE B)	*β*	*B* (SE B)	*β*
Block 1						
Constant	20.35 (1.05)		35.58 (.98)		22.47 (1.16)	
Child's gender	-1.09 (1.39)	-.08	-2.30 (1.29)	-.17	-1.99 (1.54)	-.13
Child's diagnosis	3.01 (1.34)	.22*	3.42 (1.25)	.26*	-1.03 (1.49)	-.07
Block 2						
Constant	21.94 (3.80)		35.22 (3.82)		18.86 (4.43)	
Child's gender	-.19 (1.33)	-.01	-2.26 (1.33)	-.17	-2.46 (1.54)	-.16
Child's diagnosis	2.32 (1.32)	.17	3.36 (1.33)	.26*	-.86 (1.54)	-.06
Parents' Gender	-5.45 (1.47)	-.35*	-.08 (1.48)	-.01	3.92 (1.71)	.24*
Parents' age	.06 (.09)	.07	.01 (.09)	.01	.02 (.20)	.02
Block 3						
Constant	3.52 (6.07)		20.70 (6.44)		35.90 (7.49)	
Child's gender	-.81 (1.25)	-.06	-3.24 (1.33)	-.24	-1.61 (1.55)	-.11
Child' diagnosis	1.55 (1.22)	.11	2.86 (1.30)	.22*	-.20 (1.51)	-.01
Parents' Gender	-5.22 (1.35)	-.34*	-.04 (1.43)	-.00	3.79 (1.66)	.23*
Parents' age	.05 (.08)	.06	-.02 (.08)	-.03	.04 (.10)	.05
Social support	.18 (.04)	.36*	.03 (.04)	.07	-.10 (.05)	-.20*
Spirituality	.31 (.15)	.18*	.48 (.16)	.29*	-.42 (.19)	-.22*

Note. Life satisfaction (DV). R^2 = .06 for block 1; ΔR^2 = .14, .14 for block 2 & 3 respectively. Positive affect (DV). R^2 = .11 for block 1; ΔR^2 = .00, .07 for block 2 & 3 respectively. Negative affect (DV). R^2 = .02 for block; ΔR^2 = .05, .07. for block 2 & 3 respectively; *p < .05.

Hypothesis two.

The second hypothesis states that spirituality will significantly influence all three indices SWB: (1) spirituality will predict life satisfaction, (2) spirituality will predict positive affect, and (3) spirituality will predict negative affect, controlling the possible effects of some sociodemographic variables. To test these hypotheses, a hierarchical regression was used (see Table 4). The results revealed that spirituality (β = .18, p = .049, Part R^2 = .03) was a significant predicted of life satisfaction when life satisfaction was considered as the outcome variable but was the least predictor between it and social support. Similarly, spirituality (β = .29, p = .004,

Part R^2 = .07) significantly predicted positive affect and was the only significant predictor in the model. Spirituality was also found to be a significant and the majority predictor of negative affect (β = -.22, p = .030, Part R^2 = .04) after entering it with social support in the third block when negative affect was considered as the outcome variable. These findings revealed that all the three subsets of hypotheses namely, (1) spirituality will predict life satisfaction, (2) spirituality will predict positive affect, and (3) spirituality will predict negative affect, were accepted.

Hypothesis three.

To examine the third hypothesis that the association between social support and the three components of SWB would be mediated by resilience, a mediational regression analysis was conducted using the Model 4 of the PROCESS macro created by Hayes (2012) with a recommended bias-corrected bootstrap confidence interval set at 5,000 bootstraps (Hayes, 2009). Separate analyses were conducted relative to the components of SWB while controlling for the effects of spirituality. Spirituality was treated as a covariate based on the suggestion by Hayes (2013). He postulated that, with multiple X variables mediation analysis could be either treated separately or simultaneously. When treated simultaneously in PROCESS, one X variable must be considered as the independent variable while the others covaried.

In the first analysis life satisfaction was considered as the outcome variable. The first regression model produced results whereby resilience is predicted by social support. The model was significant, R^2 = .30, F (2, 100) = 21.28, p < .001, and further showed that social support (B = .14, p < .001) and spirituality (B = .36, p < .001) predicted resilience. In the second model (i.e., the direct effect of social support on life satisfaction accounting for the mediator), results showed that the model was significant, R^2 = .27, F (3, 99) = 12.01, p < .001; furthermore, social support was a significant predictor of life satisfaction (B = .10, p = .036), likewise resilience (B = .59, p <

.001), but not spirituality. For the total effect output (i.e., the effect of social support on life satisfaction while not accounting for the mediator), it was revealed that the model was significant, R^2 = .17, F (2, 100) = 10.02, p < .001 and life satisfaction was significantly influenced by social support (B = .19, p < .001) but not spirituality. The indirect effect having the relationship between social support and life satisfaction mediated via resilience was statistically significant because the estimated confidence interval was totally beyond zero (95% CI: .04 to .14).

The second analysis had positive affect as the outcome variable. In the first regression model which was significant (R^2 = .29, F [2, 102] = 20.44, p < .001), it was found that resilience was significantly predicted by social support, (B = .13, p < .001) and spirituality (B = .39, p < .001). In the second model (i.e., the direct effect between social support and positive affect while accounting for the mediator), results showed that the model was significant, R^2 = .21, F (3, 101) = 9.16, p < .001; however, social support and spirituality did not significantly predict positive affect, but resilience significantly predicted positive affect (B = .68, p < .001). For the total effect model (i.e., the effect of social support on positive affect while not accounting for the mediator), the results showed a significant model, R^2 = .27, F (2, 102) = 3.30, p = .024 and social support did not significantly influence positive affect, but spirituality did (B = .43, p = .008). Despite these results, there was a significant indirect effect between social support and positive affect through resilience as the confidence interval was entirely above zero (indirect effect, 95% CI: .05 to .16).

In the last analysis negative affect was considered as the criterion. The first model was significant, (R^2 = .28, F [2, 100] = 19.55, p < .001), having social support (B = .13, p < .001) and spirituality (B = .40, p < .001) statistically predicting resilience. For the second model (i.e., the

direct effect between social support and negative affect when the mediator is included in the model), results showed a significant model, R^2 = .21, F (3, 99) = 8.95, p < .001; nonetheless, social support and spirituality were not significant predictors of negative affect (B = -.01, p = .830) but resilience was a significant predictor (B = -.71, p < .001). The model containing the total effect (i.e., the effect of social support on negative affect when the mediator is not included in the model), was significant, R^2 = .09, F (2, 100) = 4.90, p = .009 and social support (B = -.11, p = .037) as well as spirituality (B = -.46, p = .014) significantly predicted negative affect. Results also revealed a significant indirect impact of social support through resilience on negative affect as the confidence interval was above zero (indirect effect, 95% CI: -.15 to -.05).

The hypothesis that social support will have an influence on the components of SWB namely, life satisfaction, positive affect and negative affect through the resilience of parents of children with special needs was supported. From the results, social support indirectly influenced life satisfaction, positive affect and negative affect through its effect on resilience. See Table 5 and Figure 1 for the summaries.

Table 5

Mediational analysis of social support (SS) and SWB via resilience while controlling spirituality

	Life satisfaction (n = 101)		Positive affect (n = 103)		Negative affect (n = 101)	
	B (SE B)	*p*	*B* (SE B)	*p*	*B* (SE B)	*p*
Constant	.21 (5.34)	.97	19.28 (5.34)	.001	42.86 (6.19)	.000
Spirituality	.08 (.16)	.61	.16 (.16)	.311	-.18 (.19)	.337
Resilience	.59 (.16)	.000	.68 (.16)	.000	-.71 (.18)	.000
SS predicting resilience	.14 (.03)	.000	.13 (.03)	.000	.13 (.03)	.000
Direct effect of SS	.10 (.05)	.035	-.05 (.05)	.286	-.01 (.05)	.815
Total effect of SS	.19 (.05)	.000	.04 (.05)	.371	-.11 (.05)	.037
Indirect effect of SS via resilience on DVs; 95% CI; (*B* [SE *B*])	.04, .15 (.08 [.03])		.05, .16 (.09 [.03])		-.15, -.05 (-.09 [.03])	
R^2	.27		.21		.21	

Note. CI = Confidence interval; *B* = unstandardized coefficient. Bootstrapped samples = 5,000

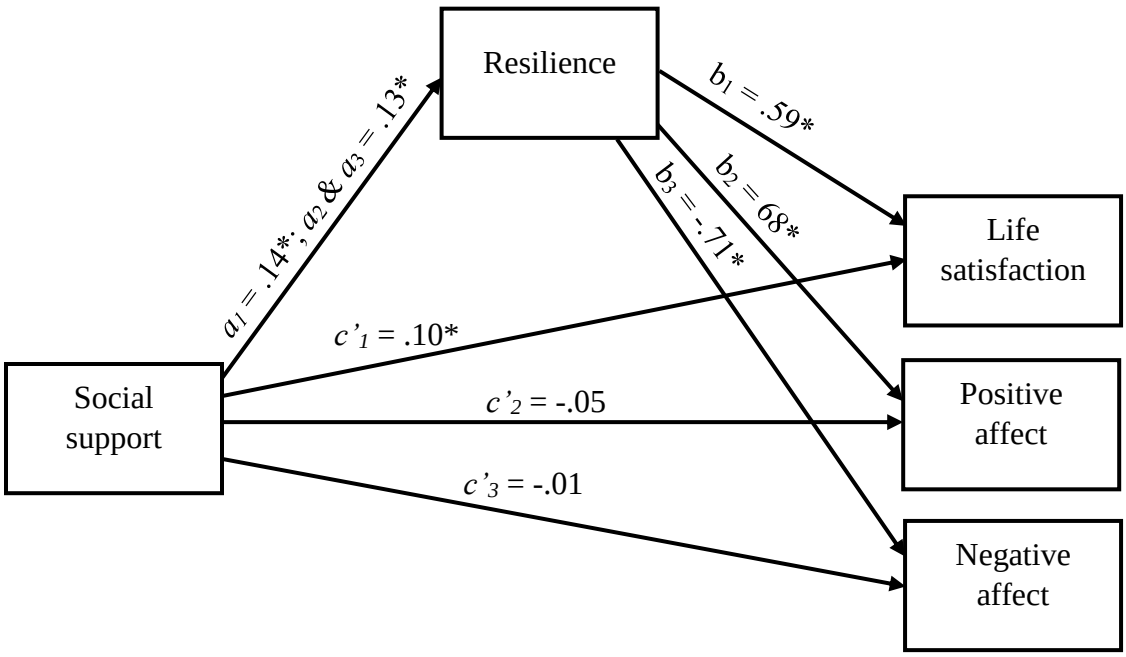

Figure 2. Observed model for the relationship between social support through resilience on the components of SWB. *p < .05. a = IV influences mediator pathway. b = mediator influences DV pathway. c = direct effect pathway

Hypothesis four.

The hypothesis that the relationship between spirituality and the three components of SWB would be mediated by resilience, was examined using a mediational analysis conducted with the Model 4 of the SPSS PROCESS macro created by Hayes (2012). A recommended bias-corrected bootstrap confidence interval set at 5,000 bootstrap sample (Hayes, 2009) was also used. Separate analyses were conducted relative to the components of SWB while controlling for the effects of social support. Social support was also covaried following the recommendation of Hayes (2013), who suggested that multiple X variables could be treated either separately or simultaneously. When treated simultaneously in PROCESS, one X variable must be considered as the independent variable while the others covaried.

In the first regression model of the first analysis considering Life satisfaction as the main outcome variable, both spirituality (B = .36, p < .001) and social support (B = .14, p < .001) were found to significantly influence resilience; moreover, the model was significant R^2 = .30, F (2, 100) = 21.28, p < .001. The second model (i.e., the direct effect of spirituality on life satisfaction accounting for the mediator), was also significant, R^2 = .27, F (3, 99) = 12.01, p < .001, however spirituality failed to predict life satisfaction; resilience on the other hand statistically predicted life satisfaction (B = .59, p < .001) and so was social support (B = .10, p = .036). For the total effect output (i.e., the effect of spirituality on life satisfaction while not accounting for the mediator), a significant model was found, R^2 = .17, F (2, 100) = 10.02, p < .001 and life satisfaction was not significantly influenced by spirituality, but social support did (B = .19, p < .001). The indirect effect when the relationship between social support and life satisfaction is mediated via resilience was statistically significant as the confidence interval was entirely above zero (95% CI: .10 to .39).

In the second analysis Positive affect was entered as the criterion variable. The first regression model was significant (R^2 = .29, F [2, 102] = 20.44, p < .001), it was found that resilience was significantly predicted by spirituality (B = .39, p < .001) and social support (B = .13, p < .001). Results showed that the second model (i.e., the direct effect between spirituality and positive affect while accounting for the mediator), was also significant, R^2 = .21, F (3, 101) = 9.16, p < .001; nevertheless, spirituality and social support failed in predicting positive affect (B = .15, p = .334) but resilience significantly predicted positive affect (B = .68, p < .001). For the total effect model (i.e., the effect of spirituality on positive affect while not accounting for the mediator), results showed that the model was significant, R^2 = .07, F (2, 102) = 3.88, p = .024 and spirituality significantly influenced positive affect (B = .45, p = .005) but social support did not. The result for the indirect effect of spirituality through resilience on positive affect was significant as the bootstrapped confidence interval did not include zero (95% CI: .11 to .52).

In the last analysis negative affect was considered as the dependent variable. For the first model, a significance was reached (R^2 = .28, F [2, 100] = 19.55, p < .001), having resilience statistically predicted by spirituality (B = .40, p < .001) and social support (B = .13, p < .001). In the second output (i.e., the direct effect between spirituality and negative affect when the mediator is included in the model), a significant model was found R^2 = .21, F (7, 93) = 4.34, p < .001; resilience was a significant predictor of negative affect (B = -.71, p < .001) but spirituality and social support failed to predict negative affect. Similarly, the model of the total effect (i.e., the effect of spirituality on negative affect when the mediator is not included in the model), was significant, R^2 = .09, F (2, 100) = 4.90, p = .009 and both spirituality (B = -.46, p = .014) and social support (B = -.11, p = .037) significantly contributed to the variance in the model. There

was also a significant indirect effect between spirituality and negative affect via resilience as the 95% bootstrapped confidence interval was totally above zero (95% CI: -.52 to -.13).

The hypothesis that spirituality will, through resilience, have an influence on the components of SWB namely, life satisfaction, positive affect and negative affect of parents of children with special needs was supported. From the results, resilience had a statistically significant indirect effect between the X and the individual Y variables. See Table 6 and Figure 2 for summaries.

Table 6

Mediational analysis of spirituality and the components of SWB via resilience while controlling social support

	Life satisfaction (n = 101)		Positive affect (n = 103)		Negative affect (n = 101)	
Model	*B* (SE B)	*p*	*B* (SE B)	*p*	*B* (SE B)	*p*
Constant	.21 (5.34)	.97	19.28 (5.34)	.001	42.86 (6.19)	.000
Social support	.10 (.05)	.036	-.05 (.05)	.286	-.01 (.05)	.815
Resilience	.59 (.16)	.000	.68 (.16)	.000	-.71 (.18)	.000
Spirituality predicting resilience	.36 (.09)	.000	.39 (.09)	.000	.40 (.10)	.000
Direct effect of spirituality	.08 (.16)	.613	.16 (.16)	.311	-.18 (.19)	.337
Total effect of spirituality	.30 (.16)	.067	.43 (.16)	.008	-.46 (.18)	.014
Indirect effect of spirituality via Resilience on DVs; 95% CI; (B [SE B])	.10, .39 (.22 [.07])		.11, .52 (.27 [.10])		-.52, -.13 (-.28 [.10])	
R^2	.27		.21		.21	

Note. CI = Confidence interval; *B* = unstandardized coefficient. Bootstrapped samples = 5,000

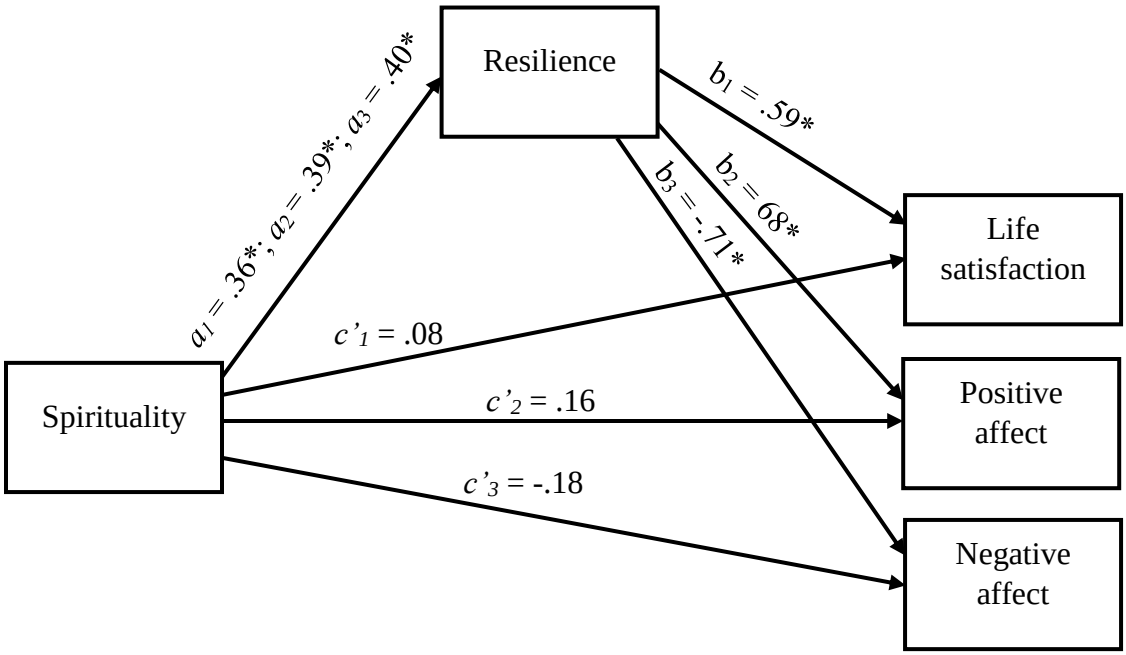

Figure 3. Observed model for the relationship between spirituality through resilience on the components of SWB. *$p < .05$. *a* = IV influences mediator pathway. b = mediator influences DV pathway. c = direct effect pathway.

Summary of results

This study primarily formulated and tested four hypotheses to examine the influence of social support, spiritualty, resilience on the subjective well-being (i.e., Life satisfaction, positive affect and negative affect) of parents of children with special needs in Ghana. The findings of the present study are thus enumerated:

1. Social support significantly predicted Life satisfaction and negative affect; however, not affect positive affect.
2. Spirituality significantly predicted Life satisfaction, positive affect and negative affect.
3. Resilience was a significant mediator of the relationship between social support and subjective well-being (i.e., Life satisfaction, positive affect and negative affect)
4. Resilience was a significant mediator of the relationship between spirituality and subjective well-being (i.e., Life satisfaction, positive affect and negative affect)

CHAPTER FIVE

Discussion

This study examined the influence of social support, spirituality and resilience in the subjective well-being of parents of special needs children. Specifically, it examined the significance of social support and spirituality in parents' subjective well-being (SWB) and advanced previous research by investigating the potential mediating role of resilience between these relationships. This chapter therefore begins with thorough discussions of the findings of the present study using previous studies and theories. Also included in this chapter are implications for practice, limitations, recommendations for future research and conclusion.

Discussion of Main Research Findings

The discussion is organized and presented in three separate sections reflecting the general aim and specific objectives of the present study. The first section discusses the finding on the influence of social support on the subjective well-being of parents of children with special needs. This is followed by a discussion of how spirituality predicted subjective well-being of parents. Lastly, the results for the mediating role of resilience was discussed.

Social support in parents' subjective well-being.

The first objective of the study was to determine whether social support predicted the subjective well-being of parents of children with special needs. In pursuing this objective, it was hypothesized that social support will predict the subjective well-being (i.e., life satisfaction, positive affect and negative affect) of parents of special needs children. The analysed results demonstrated that the hypothesis was partially supported; that is, social support accounted for decent variance in life satisfaction and negative affect but not positive affect, after controlling for parents' gender, parents' age, child's age and diagnosis. It suggests that perceived social support

is important to parent's cognitive appraisal of contentment also for the mitigation of unpleasant emotions but not strong enough to boost pleasant emotions. This finding is in accord with previous literature conducted among parents of children with disabilities showing that social support associated positively with life satisfaction and positive affect and negatively with negative affect and depression (Ekas et al., 2010; Lu et al., 2015; Lu et al., 2018). In order words, higher reports of social support were linked to increases in life satisfaction as well as positive affect and lowering of negative affect and depression. A plausible explanation of this established significance may hinge on the cultural system of collectivism. Ghana like many African countries has been described as collectivistic (Adams & Dzokoto, 2003; Wiredu & Gyekye, 1992), where individuals are closely connected to other individuals and life is shared. The same could be said of parents in this study. Being in a collectivistic culture and sharing warmth and intimate relationships with others creates the opportunity for parents to perceive those in their social network as adequately capable of providing the resources necessary for experiencing satisfaction with life as well as reduced negative emotions.

According to the bottom-up and top-down theories of subjective well-being, particularly the bottom-up perspective, subjective well-being is developed through the summation of pleasurable moments in specific life domains. In other words, an individual's experience of happiness or content is derived from enjoying pleasurable moments from work, family or marriage (Feist et al. 1995). It suggests that participating parents would experience increased subjective well-being when they perceive pleasure and support from their friends, family and significant others. The finding of the study that perceived social support influences life satisfaction and negative affect is reflective of the posits of the theory.

The perceived support nevertheless did not extend to positive emotions as it was found that social support contributed no significant variance to positive affect. This finding contradicts existing literature (Ekas et al., 2010; Halstead, Griffith & Hastings, 2017) but is supported by other research that did not find social support to be predictive of parents' well-being (Gallagher, & Whiteley, 2013; Smith & Grzywacz, 2014). It implies that irrespective of the amount of social support perceived, parents of children with special needs do not deem it enough to contribute to their experiencing of positive emotions. Or perhaps the reduced time for engaging in leisure activities linked to raising a child with disability (Brandon, 2007; Crowe & Florez, 2006) does not permit parents to socialize with their friends, family or significant others in order to elevate positive emotions (Smith et al., 2009). Another explanation for recording a non-significance could be ascribed to the scale used in measuring social support. The current study used a scale that measured 'perceived support' and perhaps a scale that measures 'actual support' may have been more important in significantly predicting parents' positive affect of parents.

Spirituality and subjective well-being.

The second research objective was to test whether spirituality predicted the SWB of parents with children with special needs. To statistically test this objective, it was predicted that spirituality will have an impact on the subjective well-being of parents of children with special needs. It was found that spirituality significantly predicted all three indices of subjective well-being—life satisfaction, positive affect and negative affect—of parents. Interestingly, spirituality demonstrated relevance in increasing life satisfaction as well as positive affect and reducing negative affect. This finding corroborates previous literature (Ekas, Whitman & Shivers, 2009; Poston & Turnbull, 2004; Taub & Werner, 2016) that have found that spirituality is a critical source of well-being of parents of children with disabilities. Mbiti (1969) postulated that

"Africans are notoriously religious" (p. 1), hence, highly spiritual. Poston and Turnbull (2004) have also mentioned that parents or families lean towards their spirituality and faith to find meaning in life, gain strength and hope, and navigate the stresses involved in providing for a child with special needs. Reasonably, parents of the current study, being Africans rely mostly on spirituality to manage and overcome the stresses of raising their children. This reliance helps them in many ways for example, gain understanding from having a child with special needs which consequently aids in to appraise their lives. It also helps them to develop hope, faith and positive emotions and ultimately to deal with the stresses and negative emotions linked to caring for a child with special needs. In line with the bottom-up and top-down theories of subjective well-being, it could be argued that spirituality is a great determinant of subjective well-being in Ghanaian parents of special needs children. The top-down explains subjective well-being to be determined by a person's predispositions to interpret events in a positive or negative way thus emphasizing intrinsic processes. Spirituality as an internal process (Piedmont & Friedman, 2012) instils hope and faith, dispositions used by parents to interpret stressful situations in a more positive light; thereby experiencing happiness and less stress.

Social support, spirituality and well-being: the role of resilience.

The third and fourth objective was to investigate the potential mediating role of resilience in the relationship between social support and SWB as well as spirituality and SWB. Thus, it was hypothesized that resilience will mediate the relationship between social support and subjective well-being as well as spirituality and subjective well-being. Results from the mediation analyses revealed that resilience was a significant mediator, therefore supporting the third and fourth hypotheses. These findings demonstrate the importance of resilience when examining the correlation between social support and well-being as well as spirituality and well-being. The

findings further highlight resilience as a process through which social support and spirituality exerts its beneficial influence on subjective well-being of parents. Thus, these findings replicate and extend literature that found that parents with higher social support and spirituality levels are more likely to foster resilience (Bayat, 2007; Pandya, 2018; Ruiz-Robledillo et al., 2014). Furthermore, the findings corroborate previous studies that have revealed that increasing levels of resilience are related to greater well-being of caregivers of children with disabilities (Bitsika et al., 2013; Halstead et al., 2018; Rosenberg et al., 2014). Lastly, the results add to the literature that have considered resilience as a potential mediating factor either amongst parents of children with special needs (Ginevra et al., 2017; Migerode et al., 2012) or other populations (Bajaj & Tande, 2016; Lü, et al., 2014).

Overall the findings suggest that the protective effects of social support and spirituality promotes parents' capacity to recover from the stressful demands associated with raising their children with special needs and the presence of this capacity consequently improves subjective well-being. To elaborate further, parents who perceive having more support from friends, family and significant others and have greater levels of spirituality may develop the dynamic capacity to overcome stressors linked to raising their children with special needs; subsequently, increasing their life satisfaction as well as positive emotions and reducing their experiences of negative emotions. One possible explanation of these findings could be that the cultural system of interdependence or collectivism practiced by most Ghanaians (Wiredu & Gyekye, 1992) and the ubiquitous reliance on spirituality (Gyekye, 1996) served in protecting parents against the adversities encountered from having a special child. This in turn helps them develop a positive outlook to life and be happy. The theory of resilience by Rutter (1985) sheds some light upon the significant mediating role of resilience. The theory simply posits that in the face of adversity,

resilience develops through adequate protective resources. Thus, the more coping resources parents find in their informal support network and in their spiritual lives, the higher they develop resilience, further increasing positive adaptation and reducing negative consequences.

Implications for Clinical Practice

The evidence from the present research has several practical implications for clinical practice and mental health service delivery in general. The study provides valuable findings about the relative importance of social support and spirituality as protective resources to subjective well-being. It also highlights how resilience can be promoted as a function of the availability of protective resources and how resilience can foster happiness. This information can be used by clinicians, health workers, spiritual leaders or any professional working with parents or caregivers raising children with special needs to design culturally sensitive, resilience enhancing interventions intended to reduce stresses and increase well-being. Practitioners using this information may subsequently widen their knowledge about the dimensions of subjective well-being, their intricate relationships, protective factors, the relevance of resilience and its role in improving well-being. This could facilitate easy or smooth provision of appropriate and client-centred interventions.

Administrators of parent support group can equally incorporate the findings of the present study in their activities. For instance, creating a numinous and cordial atmosphere during scheduled meeting purposed to boost resilience and improve well-being. They could also encourage parents to concentrate on the positive aspects of providing for a child with special needs which is needed for building resilience. Another implication of the information gained from this study is that it can be incorporated into training programs, for instance introduction of the concept of resilience to psychotherapy or guidance and counselling courses of undergraduate

or graduate programmes. Since the present study is premised on the philosophy of positive psychology, its findings thence contribute significant knowledge to this branch of psychology in Ghana and the world at large. Ultimately, information from this study can help increase parents' knowledge about resilience and subjective well-being. Which is necessary to boost their own well-being if they are to continue to provide care for their children and other family members.

Limitations of Research

Though the findings of the present research confirm and fill a gap existing in literature, it is still replete with limitations. The study must not be interpreted therefore without considering these limitations. The foremost limitation is with the small size of the study sample, which can be attributed to constraints encountered during data collection. With an inadequate sample size, it becomes rather challenging to generalize the results to larger and prominent population of parents or families of children with special needs in Ghana and beyond. Secondly, the present research participants were quite homogenous in a sense that an examination of the demographic characteristics reveals majority were mothers, belonged to middle or high socioeconomic classes, had tertiary level education and had their children admitted in special schools. This again creates difficulties generalizing the results to fathers, parents with low socioeconomic status, lower education levels and who do not have their children in special schools. Also, using Accra, a metropolitan city, restricts generalization to only urban areas thus excluding parents in rural areas. Recruiting and selecting parents from support groups who may otherwise be receiving adequate support could have introduced a confound; perhaps, this may have skewed responses on the social support scale. Thirdly, by using a correlational design, the findings insufficiently explain why a relationship exists between the study variables (cause-and-effect relationship), nonetheless, this design has the advantage of collecting data from a large group of people at a

specific time and further determine the relationship (strength and direction) between variables. Fourth, there is the problem of collecting data solely with self-report measures. Even though the instruments were chosen for their sound psychometric properties, self-reports are rife with biases for instance, social desirability responding, guessing or random responding. Also using online survey may have introduced some biases. Another limitation is with the procedure of collecting data—specifically, where parents had to return their completed paper-and-pencil surveys to school administrators. This procedure of collecting data could have potentially encouraged socially desirable responding and compromised confidentiality. Lastly, it is worth mentioning that a potential confound may have been introduced by including the 3 parental couples and the very few participants from whom data was collected using the Akan translated questionnaire. The study would have been cleaner had they not been included; however, excluding them would have reduced the sample size ergo statistical power.

Recommendations for Future Research

Interested researchers could capitalize on the above-mentioned shortcomings to conduct future studies. Foremost, due to the relatively small sample size, future researches should use a larger and representative sample which could increase statistical power to detect significance (especially finding a significant direct effect of social support on positive affect) and increase the chances of generalizing results to a wider population. Second, future researchers should consider collecting a more heterogenous data to increase representativeness; thus, data could be collected from parents in the rural settings and from parents who do not necessarily have their children attending special schools. Third, a longitudinal study could be conducted to determine whether similar results may be found over a protracted period and to determine the causal relationships between the study variables. Additionally, a mixed method design could be used: the qualitative

aspect may tease out unique experiences in utilizing protective factors and the quantitative aspect would further explore the relationship between other potential protective resources, such as optimism and hope. Also, future studies should attempt to simultaneously test resilience as both a mediator and a moderator within the same research because, it has been suggested that integrating both mediator and moderator variables provides a richer explanation of a phenomenon than considering only one (Karazsia, van Dulmen, Wong, & Crowther, 2013). Going forward, researches in Ghana could examine the relationship between SWB and the types of support, specifically, the subscales of the Multidimensional scale of perceived social support, namely family, friends and significant other. As examining these intricate relationships were beyond the scope of the present study. Lastly, researchers conducting studies on SWB may consider using other measures including experiential instruments (e.g., experience sampling and the day reconstruction method; Lucas, 2018) in addition to self-report rating to reduce subjectivity.

Conclusion

In summation, the present study examined the influence of social support and spirituality in the subjective well-being of 107 biological parents caring for children with special needs in Ghana as well as the role of resilience in mediating the relationship between these factors. Results suggest that social support and spirituality are relevant protective resources when used by parents of children with special healthcare needs increases their well-being levels. It was further revealed that resilience, the capacity to overcome stressors associated with having a child with special needs, is one potential mechanism or process that can explain the relationship between the protective factors of social support, spirituality and the outcome variable of subjective well-being.

Considering the findings, efforts should therefore be made by clinicians, spiritual leaders, support groups and health workers to encourage parents to continue to rely on these protective resources so that they can develop resilience for the increment of positive outcomes and diminution of negative consequences.

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APPENDICES

Appendix A

Ethical clearance.

UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)
P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No.....

1st November, 2017

Mr. Dey Eugene Nutifafa Yaw
Department of Psychology
University of Ghana
Legon

Dear Mr. Yaw,

ECH 038/17-18: SOCIAL SUPPORT, RESILIENCE, RELIGIOSITY AND SPIRITUALITY IN THE SUBJECTIVE WELL-BEING OF PARENTS OF CHILDREN WITH SPECIAL NEEDS

This is to advise you that the above reference study has been presented to the Ethics Committee for the Humanities for a full board review and the following actions taken subject to the conditions and explanation provided below:

Expiry Date:	31/05/18
On Agenda for:	Initial Submission
Date of Submission:	18/09/17
ECH Action:	Approved
Reporting:	Quarterly

UG/ISSER/ECH VALID UNTIL 31 MAY 2017 APPROVED DOCUMENT

Please accept my congratulations.

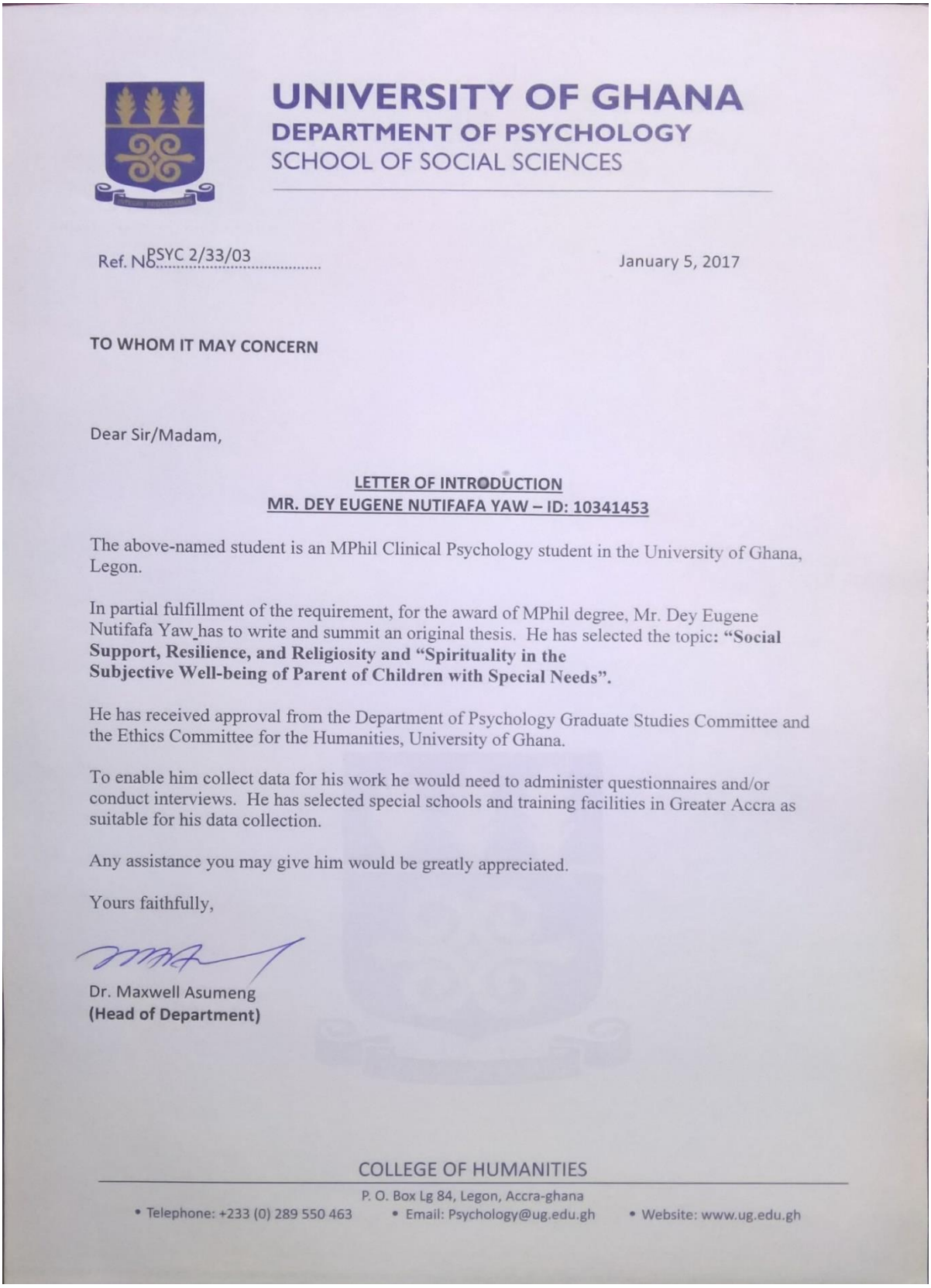
Yours Sincerely,

Rev. Prof. J. O. Y. Mante
ECH Chair

CC: Dr. Maxwell Asumeng, Department of Psychology, University of Ghana.

Tel: +233-303933866 Email: ech@ug.edu.gh | ech@isser.edu.gh

Introductory letter from Department of Psychology.



UNIVERSITY OF GHANA
DEPARTMENT OF PSYCHOLOGY
SCHOOL OF SOCIAL SCIENCES

Ref. No. PSYC 2/33/03 January 5, 2017

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION
MR. DEY EUGENE NUTIFAFA YAW – ID: 10341453

The above-named student is an MPhil Clinical Psychology student in the University of Ghana, Legon.

In partial fulfillment of the requirement, for the award of MPhil degree, Mr. Dey Eugene Nutifafa Yaw has to write and summit an original thesis. He has selected the topic: **"Social Support, Resilience, and Religiosity and "Spirituality in the Subjective Well-being of Parent of Children with Special Needs".**

He has received approval from the Department of Psychology Graduate Studies Committee and the Ethics Committee for the Humanities, University of Ghana.

To enable him collect data for his work he would need to administer questionnaires and/or conduct interviews. He has selected special schools and training facilities in Greater Accra as suitable for his data collection.

Any assistance you may give him would be greatly appreciated.

Yours faithfully,

Dr. Maxwell Asumeng
(Head of Department)

COLLEGE OF HUMANITIES
P. O. Box Lg 84, Legon, Accra-ghana
• Telephone: +233 (0) 289 550 463 • Email: Psychology@ug.edu.gh • Website: www.ug.edu.gh

Appendix B

Questionnaire.

Department of Psychology

University of Ghana

Dear Participant,

My name is Nutifafa Dey, a graduate student of the University of Ghana, pursuing a course leading to the award of an MPhil in Clinical Psychology. To achieve this, I am conducting a research on the subjective well-being of parents of children with special needs. Your contribution through honest completion of this survey is very much appreciated. Confidentiality is assured (**no names required**) and information provided will be used strictly for academic purposes. There is no right or wrong answer! Kindly sign (**Again Your name is not required**) if you have agreed to take part in this study…….

Feel free to contact me if you have questions, suggestions or concerns;
0272279950/neydey@st.ug.edu.gh

SECTION A: DEMOGRAPHIC DATA

Parent Bio

1. Gender: Male [ ] Female [ ]

2.What is your age? _____

3. What is your marital status?

a. Single
b. Married
c. Separated
d. Divorced
e. Widowed

5. Are you currently a member of any support group?

Yes [ ] No [ ]

6. What is your religion?

a. None
b. Protestant
c. Pentecostal/Charismatic
d. Catholic
e. Muslim
f. Other (specify) _____

Socioeconomic indexes

1. What is your household's average monthly income?

a. GH₵ 0 - 600
b. GH₵ 600 – 1,200
c. GH₵ 1,200 – 1,800
d. GH₵ 1,800 – 2,400
e. GH₵ 2,400 – 3,000
f. GH₵ 3,000 – above

2. What is your employment status?

a. Not employed
b. Private institution
c. Government institution
d. Self-employed/entrepreneur
e. Other (specify) _____

3. What is your highest level of education?

a. None
b. Primary/Basic school
c. Secondary/technical/vocational
d. Undergraduate (Tertiary)
e. Postgraduate
f. Other (specify)_____

Special Child's Bio

1. Gender: Male [ ] Female [ ]
2. Age_____
3. Child's Diagnosis
   a. Autism Spectrum Disorder (ASD)
   b. Attention Deficit Hyperactivity Disorder (ADHD)
   c. Down's Syndrome (DS)
   d. Cerebral Palsy (CP)
   e. Dual diagnoses
   f. Other (specify) _____
4. Is your child accessing therapy?

   Yes [ ] No [ ]

SECTION B

Instruction: Please answer the following questions using the response scale below. Indicate your degree of agreement (using a score ranging from 1-7) to the following sentences by circling the numbers in the boxes below.

1= Strongly Disagree 2= Disagree 3= Slightly Disagree 4= Neither Agree or Disagree 5=Slightly Agree 6= Agree 7= Strongly Agree

	Items	Responses						
1	In most ways, my life is close to my ideal	1	2	3	4	5	6	7
2	The conditions of my life are excellent.	1	2	3	4	5	6	7
3	I am satisfied with my life.	1	2	3	4	5	6	7
4	So far, I have gotten the important things I want in life.	1	2	3	4	5	6	7
5	If I could live my life over, I would change almost nothing	1	2	3	4	5	6	7

SECTION C

Instructions: Use the following response scale and **circle** one number for each statement to indicate how much you disagree or agree with each of the statements.

1= Strongly Disagree	2= Disagree	3= Neutral	4= Agree	5= Strongly Agree

	Items	Responses				
1	I tend to bounce back quickly after hard times	1	2	3	4	5
2	I have a hard time making it through stressful events	1	2	3	4	5
3	It does not take me long to recover from a stressful event	1	2	3	4	5
1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree						
4	It is hard for me to snap back when something bad happens	1	2	3	4	5
5	I usually come through difficult times with little trouble	1	2	3	4	5
6	I tend to take a long time to get over set-backs in my life	1	2	3	4	5

SECTION D

Instruction: This scale consists of a few words that describe different feelings and emotions. Read each item and then select the response next to each word. Kindly indicate how often you generally feel this way.

1 = Very slightly or not at all	2 = A little	3 = Moderately	4 = Quite a bit	5 = Extremely

Items	Responses						Items	Responses				
Interested	1	2	3	4	5		Irritable	1	2	3	4	5
Distressed	1	2	3	4	5		Alert	1	2	3	4	5
Excited	1	2	3	4	5		Ashamed	1	2	3	4	5
Upset	1	2	3	4	5		Inspired	1	2	3	4	5

Strong	1	2	3	4	5		Nervous	1	2	3	4	5
Guilty	1	2	3	4	5		Determined	1	2	3	4	5
Scared	1	2	3	4	5		Attentive	1	2	3	4	5
Hostile	1	2	3	4	5		Jittery	1	2	3	4	5
Enthusiastic	1	2	3	4	5		Active	1	2	3	4	5
Proud	1	2	3	4	5		Afraid	1	2	3	4	5

SECTION E

Instruction: The set of statements are interested in how you feel about some things. Read each statement carefully. Indicate by **circling** how you feel about each statement.

1 =Very Strongly Disagree 2 =Strongly Disagree 3 =Mildly Disagree 4 =Neutral
5 =Mildly Agree 6 = Strongly Agree 7 =Very Strongly Agree

	Statement	Responses						
1	There is a special person who is around when I am in need	1	2	3	4	5	6	7
2	There is a special person with whom I can share my joys and sorrows	1	2	3	4	5	6	7
3	My family really tries to help me.	1	2	3	4	5	6	7
4	I get the emotional help and support I need from my family	1	2	3	4	5	6	7
5	I have a special person who is a real source of comfort to me	1	2	3	4	5	6	7
6	My friends really try to help me	1	2	3	4	5	6	7
7	I can count on my friends when things go wrong	1	2	3	4	5	6	7
8	I can talk about my problems with my family	1	2	3	4	5	6	7
9	I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7

10	There is a special person in my life who cares about my feelings	1	2	3	4	5	6	7
11	My family is willing to help me make decisions	1	2	3	4	5	6	7
12	I can talk about my problems with my friends	1	2	3	4	5	6	7

SECTION F

The following questions deal with possible

spiritual experiences. Kindly **circle** to what extent you say you experience the following:

1. I feel God's presence.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never
2. I find strength and comfort in my religion.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never
3. I feel deep inner peace or harmony.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never
4. I desire to be closer to or in union with God.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never
5. I feel God's love for me, directly or through others.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never
6. I am spiritually touched by the beauty of creation.
    1 - Many times a day
    2 - Every day
    3 - Most days
    4 - Some days
    5 - Once in a while
    6 - Never or almost never

Appendix C

Correlation of all study variables.

Bivariate correlation between study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Life satisfaction	—																
2.Positive affect	.34**	—															
3.Negative affect	-.37**	-.43**	—														
4.Resilience	.48**	.44**	-.45**	—													
5.Spirituality	.15	.25**	-.22*	.31**	—												
6.Social support	.37**	.06	-.18	.40**	-.11	—											
7.Parents' gender	-.39**	-.06	.21*	-.12	-.01	-.04	—										
8.Parents' age	.23*	.14	-.03	.01	.14	.01	-.27**	—									
9.Marital status	.00	.01	-.13	-.01	-.10	.23*	.05	.07	—								
10.Religion	-.15	-.11	-.06	.08	.15	-.00	-.17	-.12	.08	—							
11.Monthly income	.18	-.07	.01	.01	-.10	.35**	-.34**	.17	.41**	.12	—						
12.Employment	.03	.08	-.17	.01	-.20*	-.09	-.02	-.02	.08	.01	.02	—					
13.Education	.14	.10	.01	.01	-.09	.32**	-.25*	.15	.02	-.07	.36**	.02	—				
14.Child gender	-.12	-.22*	-.12	.03	.20*	-.02	.16	-.22*	-.18	-.06	-.16	-.13	-.17	—			
15.Child age	.05	-.00	-.05	.01	.02	.10	.01	.67**	.17	-.17	.18	.06	.04	-.01	—		
16.Child diagnosis	-.23*	-.28**	.20*	-.14	-.05	-.03	.15	-.22*	.01	-.09	-.12	-.16	-.17	.23*	-.06	—	
17.Child therapy	.11	-.03	-.11	-.03	-.05	.15	-.20*	-.10	.01	.20*	.28**	-.18	.25*	-.15	-.35**	-.15	—