SPIRITUALITY, RESILIENCE, AND SOCIAL SUPPORT AS PREDICTORS OF LIFE SATISFACTION IN YOUNG ADULTS WITH A HISTORY OF CHILDHOOD TRAUMA

A dissertation submitted to the Kent State University College of Education, Health, and Human Services in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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December 2015
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The purpose of this study was to examine the relationship between the factors of resilience, spirituality, and social support to overall life satisfaction in a group of adults who experienced trauma before the age of 18. Participants for this study included 340 men and women who ranged in age from 18 to 30. Participation included completion of a demographic questionnaire, The Satisfaction with Life Scale (SWLS), The Assessment of Spirituality and Religious Sentiments (ASPIRES), The Connor-Davidson Resilience Scale 10 (CD-RISC 10), and The 2-Way Social Support Scale (2-Way SSS). Data were analyzed using a multiple regression analysis.

The current study demonstrated that several protective factors contribute to the positive outcome of life satisfaction in young adults with a history of childhood trauma. Among these protective factors are: Resilience, given instrumental social support, received instrumental social support, given emotional social support, received emotional social support, sex, involvement in a supportive romantic relationship, and level of education.
ACKNOWLEDGMENTS

For me the process of writing a dissertation took faith, perseverance, and support from key people in my life. It would not have been possible to have come this far without any one of these things and I would like to take this opportunity to thank those who were supportive of this process. The first people I would like to thank are the participants in my study. Your willingness to share such a personal and painful part of your past is amazing and I hope that you continue to experience healing.

Next, I would like to thank my dissertation committee members, Dr. Steve Rainey, Dr. Cynthia Osborn, and Dr. Jason Schenker. Dr. Rainey, you have been a great support to me throughout my doctoral program. I appreciate that you have always encouraged me and valued my ideas. Your support was instrumental in helping me complete my dissertation. Dr. Osborn, your attention to detail and strength as both a counselor educator and editor have helped me to become a better writer. Dr. Schenker, from the time I had you as an instructor in statistics to your advising on my dissertation, you had the ability to explain data analyses to me in a way that makes sense. You have been such a help with the data analysis for my dissertation.

There are a few other people who I would like to thank. Dr. Kelly Cichy, thank you for serving as the Graduate Faculty Representative for my dissertation. Your feedback helped to make my dissertation more polished. Mr. Edward Bolden, your assistance with statistical analyses saved me hours of work. Dr. James Johnson, thank you for your technological expertise, who knew that paginating a dissertation, could be such a complex process? Mr. Ron Moore, thank you for your generosity and
graciousness with proofreading my last chapter of the dissertation. You are a magnificent educator and valued colleague.

I would also like to thank my friends for their support and encouragement throughout this process. Your support made it so much easier to continue my studies. Finally, I would like to thank my parents. My dad always encouraged me to learn as much as I could, to stand up for my beliefs, and not let anything hold me back from success. My mom always stressed the importance of education and family. Both of my parents demonstrated perseverance and faith; without them, and the lessons that they taught me over the years, I would not have been able to finish this project.
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CHAPTER I
INTRODUCTION TO THE STUDY AND REVIEW OF THE LITERATURE

Researchers have explored and documented the constructs of childhood trauma, life satisfaction, spirituality, resilience, and social support, and how these constructs are related to one another. However, there is a need to further explore how each of these factors influences life satisfaction. This chapter provides justification for the study of spirituality, resilience, and social support as predictors of life satisfaction in young adults who experienced childhood trauma. Each of the constructs is examined individually and in relation to each other. Among the constructs associated with positive outcomes in adults who experienced childhood trauma are spirituality (Galea, 2008), resilience (DuMont, Widom, & Czaja, 2007; Herringshaw, 1997), and social support (Fredrick & Goddard, 2008; Werner & Johnson, 2004). The research question for the current study is: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma?

Introduction to the Study

Childhood trauma is defined as a painful experience or event in childhood. It includes experiences of abuse, or serious illness of an immediate family member or the self. It can include events such as witnessing violence, residing in a household where there is substance abuse or mental illness, and experiencing death of an immediate family member (Bremner, Bolus, & Mayer, 2007). Runyan et al. (2005) added that it is the perception of the event that constitutes trauma or abuse. It is not only the actual event but the person’s response to it that makes the event traumatic. Several authors link childhood
trauma to problems long after the event ended, including anxiety, depression, and physical health problems in adulthood (Chartier, Walker, & Naimark, 2007; Macmillan, Fleming, & Streiner, 2001; Sorbo, Grimstad, Bjorngaard, Schei, & Lukasse, 2013).

Those with a history of childhood trauma are at an increased risk of long-term negative experiences. However, the focus of the current study is on persons who have experienced a positive outcome, in the form of increased life satisfaction, despite negative life situations. Life satisfaction is an individual’s overall contentment with life. Those who are more satisfied with life are both mentally and physically healthier than those with lower life satisfaction (Arrindell, Meeuwesen, & Huyse, 1991; Bigatti & Cronan, 2002; Diener, Suh, Lucas, & Smith, 1999). Adult life satisfaction remains stable over time and is influenced by early childhood experiences. Trauma during the formative years has more of a detrimental effect than trauma later in life. The experience of childhood trauma is associated with lower levels of life satisfaction in young adults over the age of 18 (Oishi & Sullivan, 2005; G. Parker et al., 1997; Singh, Manjula, & Phillip, 2012).

Childhood trauma has a negative influence on adult life satisfaction. There are protective factors, however, that serve to lessen the detrimental effects of childhood trauma. Spirituality is one of these protective factors. Spirituality is the process through which a person makes meaning and finds purpose in life (Piedmont, 1999). Persons with higher levels of spirituality also have higher levels of life satisfaction (Neimeyer, Currier, Coleman, Tomer, & Samuel, 2011). This is especially true for persons with a history of
childhood trauma. Studies suggest that the negative influence of childhood trauma on life satisfaction is tempered by spirituality (Galea, 2008; P. L. Ryan, 1998).

Like spirituality, resilience can be a protective influence for those who have experienced childhood trauma (Dumont et al., 2007). Resilience is the ability to regain a sense of normalcy after a negative life event (Miller, 2003). Higher levels of resilience have been found to lead to higher levels of life satisfaction. This is true for those who have experienced childhood trauma (Almedom, 2005).

Similar to spirituality and resilience, social support tempers the negative effects of childhood trauma and increases life satisfaction for those who have experienced childhood trauma (Siddall, Huebner, & Jiang, 2013; Siqueira, Spath, Dell’Aglio, & Koller, 2011). Shakespeare-Finch and Obst (2011) described social support as assistance that is given and received. It includes emotional support such as being a confidant to others, and providing instrumental support in the form of material items.

Multiple studies have linked childhood trauma with poor outcomes in adulthood including adult criminal behavior, depression, and unhealthy, or abusive relationships in adulthood (Chapman et al., 2004; Sorbo et al., 2013). Research also suggests that spirituality, resilience, and social support act as buffering agents to shield a person from the negative effects of trauma during the formative years. Few studies have analyzed the relationship between spirituality, resilience, and social support with respect to life satisfaction. Learning how these constructs connect is necessary to target preventive services for children who have experienced childhood trauma and to increase their adult life satisfaction (DuMont et al., 2007; Fredrick & Goddard, 2007; Galea, 2008;
The research question that guided the current study was: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma?

This chapter provides a comprehensive overview of the relevant literature on childhood trauma, life satisfaction, spirituality, resilience, and social support. This is followed by a discussion of the purpose of the study. Chapter I ends with a conclusion and a brief introduction to Chapter 2.

**Review of the Literature**

The current study sought to examine spirituality, resilience, and social support as predictors of life satisfaction in young adults who experienced childhood trauma. The following sections address definitions of each construct. The literature review addresses how these constructs have traditionally been measured and the limitations associated with quantifying childhood trauma, life satisfaction, spirituality, resilience, and social support. Outcomes associated with each of the constructs are discussed.

**Childhood Trauma**

The following section provides definitions of the types of childhood trauma and a description of each type of trauma. Next, the outcomes associated with childhood trauma are discussed in detail. The section concludes with a summary of childhood trauma.

**Defining Childhood Trauma**

There are varying definitions of childhood trauma based on culture, perception, and situation. In order to connect the experience of childhood trauma with spirituality,
resilience, and social support, a set definition of childhood trauma is necessary. This section explores definitions in the current literature, calls attention to inconsistencies in definitions, and defines childhood trauma for the current study.

Childhood trauma includes experiencing physical, emotional, and sexual abuse as a child, living with a mentally ill caregiver or substance abusing caregiver, and witnessing family violence. Other examples of childhood trauma are witnessing murder, living through natural disasters, experiencing severe illness or injury, and witnessing or experiencing an accident (Bremner, Vermetten, & Mazure, 2000; Bremner et al., 2007).

Reimer (2010) described the impact of childhood trauma in the form of growing up with a mentally ill parent. She contended that it is not just the experience of having a mentally ill parent but the situations that it places a child in and the child’s perceptions of and reactions to those situations throughout a lifetime. The experience of having a mentally ill parent varies by individual but often includes physical and emotional abuse or neglect.

Childhood trauma also includes low to moderate levels of aggression directed towards a child. Seides (2010) described this as microtrauma. Microtrauma includes the experience of less severe events such as teasing, bullying, and being used as a scapegoat. Seides stated that chronic exposure to these types of events has a lasting impact and can lead to trauma-related symptomology such as anxiety, depression, and posttraumatic stress disorder (PTSD) in the same manner as a major traumatic event. Others (Seitz et al., 2011; Shmotkin & Lomranz, 1998; Tsai, Harpaz-Rotem, Pietrzak, & Southwick, 2012) contended that repeated exposure to trauma, including microtrauma, is more
detrimental to the psychological state of a person than a single occurrence of major trauma.

Runyan et al. (2005) explored the differences between theoretical and practical definitions of child abuse. They recommended clearer descriptions of child abuse and maltreatment, and greater agreement between the definitions researchers and practitioners use. They indicated there is a discrepancy between the belief of childhood abuse and the real world descriptions of childhood abuse. They argued that these terms change over time, by profession, and culture. Additionally, there is controversy over whether trauma should be demarcated in terms of the actions of the offender or the perception of these actions by the victim. A person who feels he or she experienced trauma would suffer effects from it regardless of an external source validating the trauma. In essence, a person who identifies as having experienced trauma has experienced trauma. Therefore, a self-report of childhood trauma is as valid as a quantifiable measure of childhood trauma.

For the purpose of the current study, childhood trauma includes physical abuse, emotional abuse, and sexual abuse, as well as other experiences regarded as traumatic. *Physical abuse* involves any action by a caregiver that causes bodily harm to a child. *Emotional abuse* includes actions such as ignoring or coercive over controlling of a child and involves any behavior that psychologically harms a child. Over controlling includes threats or manipulations of a child to suit the interests of the caregiver. *Sexual abuse* involves any unwanted sexual contact (Hamarman, Pope, & Czaja, 2002; Paavilainen & Tarkka, 2003; Trickett, Mennen, Kim, & Sang, 2009). Other experiences considered to
be traumatic are serious illness of self or immediate family, death of an immediate family member, involvement in a situation where life or personal wellbeing is at risk, microtraumas, bullying, belittling, and witnessing or experiencing a natural disaster or accident (Bremner et al., 2000; Bremner et al., 2007).

**Outcomes Associated With Childhood Trauma**

Some of the negative outcomes of childhood trauma include an increased likelihood of experiencing an abusive relationship later in life, drug and alcohol abuse, poor physical health, poor mental health, sexual distress, and a predisposition to trauma later in life. However, research suggests positive experiences help to buffer the effects of childhood trauma. Without these protective experiences, negative outcomes are common (Rellini & Meston, 2007; Sorbo et al., 2013). Sorbo et al. studied the prevalence of lifetime abuse in pregnant women in Norway and found that 32% of all participants had been exposed to abuse in their lifetimes. Those who had been exposed to abuse in childhood were more likely to experience abuse in adulthood in the form of intimate partner violence, than those who had not been exposed to childhood abuse.

Rellini and Meston (2007) found that women who experienced sexual abuse in childhood had higher rates of sexual distress, including anxiety and avoidance of sexual activity, than those who did not experience sexual abuse. Additionally, Banyard and Williams (2007) found that women who experienced sexual abuse in childhood were more likely to experience substance abuse and were predisposed to revictimization later in life. This research was based on follow-up with women who had participated in treatment for substance abuse issues.
There appears to be a strong link between adverse childhood experiences and poor mental and physical health. This association is found across all types of childhood trauma (Norman et al., 2012). Chartier et al. (2007) found that those who experienced abuse or neglect also experienced more health problems in adulthood, including more frequent physician visits, emergency room visits, and reports of physical pain.

This association also extends to mental health. Macmillan et al. (2001) found a relationship between childhood trauma, poor mental health, and suicide in adulthood. Comparable to the findings of Macmillan et al., other researchers found similar connections between childhood trauma and adult mental illness. Chapman et al. (2004) and Hovens et al. (2010) reported that those with a history of childhood trauma were more likely to experience depression and anxiety in adulthood.

Research suggests that depression and anxiety are not uncommon in those who have experienced childhood trauma, with onset in adolescence and young adulthood. A study of suicidal actions in Korean college students who experienced childhood trauma (Jeon et al., 2009) found a correlation between suicidal behavior and early childhood trauma. College students were rated on suicidal ideation, attempt, and plan. High suicidality scores correlated with several types of trauma including all types of child abuse and general childhood trauma. Results suggest that trauma in childhood increases suicidal behavior in adulthood. Those who experienced emotional abuse were more likely to engage in suicidal behavior than those who experienced physical abuse, sexual abuse, or general trauma.
Sachs-Ericsson, Verona, Joiner, and Preacher (2006) studied abuse and subsequent internalizing disorders, such as depression and anxiety. All forms of abuse correlated with internalizing disorders. It was found that verbal abuse leads to self-criticism resulting in internalizing disorders. Those who experienced verbal abuse reported a higher level of internalizing disorders when compared to other types of childhood abuse. Their interpretation is that those who experience verbal abuse are more likely to accept abusive statements as truths and be more self-critical than those without a history of verbal abuse.

**Section Summary**

The effects of childhood trauma go beyond the individual and affect society as a whole. The experience of childhood trauma has lasting effects into adulthood. Childhood trauma has been associated with lower levels of achievement and education. Those with a history of trauma are less likely to finish high school and those who do finish are less likely to go on to college. Persons who report a history of childhood trauma also have poor mental health. This group experiences higher rates of depression, suicide, and anxiety than the general population (Gilbert et al., 2009; Macmillan et al., 2001).

Poor physical health is seen in adults who have experienced trauma in childhood. This population experiences more frequent emergency room visits, and higher rates of chronic illnesses than the general population (Chapman et al., 2004). Violent criminal behaviors have been associated with childhood trauma. Persons who experienced violence in the home are more likely to initiate intimate partner violence and become
involved in armed robberies (Mannon & Leitschuh, 2002). From this review of the relevant literature, there is a wealth of evidence to support negative outcomes with those who have experienced childhood trauma.

**Life Satisfaction**

The following section provides a definition of life satisfaction and the outcomes associated with it. Factors influencing life satisfaction are described in detail. The section ends with a discussion of the stability of the construct of life satisfaction.

**Defining Life Satisfaction**

Life satisfaction is a subjective construct and is defined as a level of contentment with life that remains stable over time. A level of life satisfaction depends on a person’s feelings about life circumstances and not on the actual condition of a person’s life. However, situations such as poor physical health or mental distress do contribute to changes in life satisfaction. These factors vary based on class, culture, personal belief system, and within members of the same population (Pavot & Diener, 2008).

Gamble and Gärling (2012) distinguished between the constructs of current mood, happiness, and life satisfaction. They administered the *Satisfaction with Life Scale* (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) to undergraduate students. Based on the results of the study, Gamble and Gärling (2012) hypothesized happiness is a situationally derived concept that is influenced by goal attainment, whereas life satisfaction is stable in adults over time. Life satisfaction is influenced by a number of factors including negative life situations, particularly in the formative years. Life
satisfaction stabilizes within an individual as early as late adolescence and young adulthood (Diener et al., 1985; Pavot & Diener, 2008).

**Outcomes Associated With Life Satisfaction**

Previous studies demonstrated that persons who are highly satisfied with life are happier and have better health outcomes than persons with lower levels of life satisfaction. Arrindell, van Nieuwenhuizen, and Luteijn (2001) studied life satisfaction in persons with mental health diagnoses. They found a positive relationship between a supportive partnership and increased life satisfaction. Although those with chronic mental health conditions had slightly lower scores on the SWLS, they were still within the typical range, indicating life satisfaction is consistent, rather than fluctuating.

It seems, therefore that life situations have little impact on the overall satisfaction with life score. Pavot and Diener (2008) described this as stable and sensitive nature of the SWLS. This means that life satisfaction is a stable construct from late adolescence throughout adulthood, yet positive events such as counseling and negative events such as long term illness, influence scores on the SWLS. For example, if a person scores in the “slight dissatisfaction with life” range with a score between 15 and 19, counseling may positively influence their life satisfaction to “slight satisfaction with life” range with a score between 21 and 25; however it is unlikely their scores will increase to “extreme satisfaction with life” or drop to “extreme dissatisfaction with life.” Some of the factors that contributed to an increase in scores in study participants were level of education, age, and a supportive partnership (Arrindell et al., 2001).
Spirituality

The following section provides a definition of spirituality and describes the details of it, including a discussion of the separateness of spirituality from other measures of personality. Next, the differences between spirituality and religiosity are explored. The section concludes with a discussion of the outcomes associated with spirituality.

Defining Spirituality

Spirituality has an important and individualized role in the overall well-being of a person. The way in which spirituality is experienced is unique for each person. Those with higher reported levels of spirituality have experienced positive benefits including better mental health (Maltby & Day, 2004) and better physical health (Connor, Davidson, & Lee, 2003).

It is important to understand two key concepts: spirituality and religiosity. Spirituality is an inclusive term boundless of any religious orientation or denomination: It is viewed as a motivating trait that remains stable over time. It inspires people to seek positive interactions for the benefit of others. Piedmont (2001) defined spirituality as “an individual’s efforts to construe a broad sense of personal meaning within an eschatological context” (p. 5). Essentially this means humans are aware of their own mortality and therefore they strive to create a sense of meaning, purpose, and fulfillment.

Similar to the concept of spirituality is religiosity. Religiosity is defined as involvement in organized religion and the conviction of religious beliefs. It is related to religious motivation, or the drive to live out a pious life, and is categorized as intrinsic or extrinsic, a distinction that is important (Maltby & Day, 2004). Persons with extrinsic
religious motivation become and remain involved with religion because of an external reward such as social status, connection, or protection. Persons with intrinsic religious motivation are encouraged in their beliefs based on internal feelings of peace and tranquility.

Studies of spirituality and religiosity have found that persons define spirituality and religiosity as separate constructs. Participants in P. L. Ryan’s (1998) study were clear that they were spiritual but not religious. Galea (2008) pointed out the differences between being religious and being spiritual. He defined spirituality as a personal experience and religion as involvement in an organized group of people. This distinction is important because previous studies (Galea, 2008; P. L. Ryan, 1998) showed that religiosity has a negative impact on young adult survivors of abuse. Many abuse survivors have felt ostracized by their religious community or have been told by religious officials that the abuse was punishment for some offense they committed, which may explain negative feelings towards religion.

The spiritual wellbeing and practices of young adults with a history of childhood trauma have been widely studied. Those who have experienced abuse often view religiosity negatively. Typically, the individual feels further victimized by persons in the organized religion. However, spirituality is viewed as an individual experience that engages a person in a process of search for meaning and purpose; it is associated with improved health and increased wellbeing (Galea, 2008; P. L. Ryan, 1998).

Spiritual transcendence is a component of spirituality and is defined as “the capacity of individuals to stand outside of their immediate sense of time and place and to
view life from a larger more objective perspective” (Piedmont, 1999, p. 988). This means that persons are able to view situations and the impact of behaviors of themselves and others in an unselfish way. Spiritual transcendence involves intrinsic religious motivation; it transcends religion, time, and place, and encompasses the constructs of prayer fulfillment, universality, and connectedness. In essence, spiritual transcendence is the component of spirituality that is the same for all people regardless of culture or religious affiliation. The way in which spirituality manifests itself is different for individuals over time but its underpinning components remain unchanged (Piedmont, 1999).

Prayer fulfillment involves actions, practices, and feelings of peace from an encounter with a higher power. This could involve prayer, meditation, reflection, or other similar behavior. Universality refers to the belief that all people share a common link. It is a sense of togetherness, a belief that although one is not responsible for another’s actions, one person’s actions have consequences for all. Connectedness is the belief that all humans share a similar reality and are connected across time and space. Connectedness differs from universality in that universality refers to relations among beings in the current time and place whereas connectedness is bonding with all humans who have died and those who have yet to be born. For the purpose of the current study, spirituality is defined as a person’s ability to create meaning through feelings, actions, and practices of connection and unity with all living things (Piedmont, 1999).

Those who oppose spirituality as a psychometrically measurable construct argue that spirituality is not measurable and scales that attempt to measure it are actually
measuring other aspects of personality. Piedmont’s (2004) research suggested that spirituality is a measureable construct and is a dimension of the person that cannot be measured by other instruments. He further asserted that spirituality should be considered to understand a person as a whole. Based on research, Piedmont (1999, 2001) was able to demonstrate the separateness of the construct from other psychological constructs such as those represented in the Five Factor Model of Personality (McCrae & John, 1992): Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. It is important to understand spirituality as a unique and measurable component of a person when studying the effects of it on other measurable constructs.

Outcomes Associated With Spirituality

Spirituality has been associated with many positive outcomes. Among these are lower levels of suicidal ideation (Kyle, 2013) and lower levels of anxiety (Narimani, Babolan, & Ariapooran, 2011). Spirituality has also been associated with positive outcomes for those who are in recovery from substance addiction (Piedmont, 2004). Overall, spirituality appears to provide a buffer to difficulty. The following section provides a review of relevant literature to further illustrate this association.

In a recent study on the role of spirituality as a mediating factor in suicide in young adults, Kyle (2013) found that those with higher levels of spiritual wellbeing had lower rates of suicidal ideation. Additionally, it was found that higher levels of social support led to a decreased risk for suicidal ideation. The population surveyed included traditional college students from a non-clinical population. It was found that social support, spiritual wellbeing, and reasons for living were negatively correlated with risk
for suicide. This suggests that each of these factors is important to the psychological wellbeing of an individual (Kyle, 2013).

Narimani et al. (2011) studied spirituality, competitive anxiety, and self-confidence in college athletes. Competitive anxiety is defined as debilitating apprehension prior to athletic performance. Those who held a general belief that their prayers were fulfilled and felt connected with others, two aspects of spirituality, reported lower levels of anxiety and had fewer stress related illnesses such as headache or muscle ache and had higher levels of self-confidence when compared to those who did not believe in prayer (Narimani et al., 2011).

Spirituality is also linked to positive outcomes in men and women who participated in an 8-week program for recovery from substance abuse (Piedmont, 2004). Those with higher scores on prayer fulfillment, connectedness, and universality were more likely to sustain changes made in treatment. In this study, the Assessment of Spirituality and Religious Sentiments (ASPIRES; Piedmont, 1999) was administered to participants at pre-treatment and post-treatment. Scores on the measure remained stable over time, providing evidence to support the assertion that spirituality is an aspect of personality (Piedmont, 2004) and is stable within an individual over time (Piedmont, 1999, 2001).

The positive effects of spirituality in young adults have been well demonstrated. Spirituality is associated with lower levels of suicidal ideation (Kyle, 2013), lower levels of competitive anxiety, and higher levels of self-confidence (Narimani et al., 2011), and
positive psychological functioning (Piedmont, 2004). Spirituality appears to provide protection from depression, anxiety, and suicidal ideation as early as young adulthood.

Resilience

This section provides an exploration of current definitions of resilience and includes a definition of resilience chosen for the current study. Personal, biological, and environmental factors associated with resilience are discussed. The section concludes with a discussion of the outcomes associated with resilience.

Defining Resilience

One difficulty with research of resilience is the lack of consistency in definitions (Luthar, Cicchetti, & Becker, 2000). Over the past decade the definition of resilience has evolved with ongoing research. Most definitions share the common theme of a person enduring challenges without developing mental illness (Miller, 2003). Some take this concept one step further and describe a resilient person as one who succeeds after misfortune. Success is usually defined in terms of meeting a societal or personal standard of accomplishment, such as obtaining an education or job (Collishaw et al., 2007). In recent years the concept of resilience is approached from a multidisciplinary perspective involving both social sciences and biological sciences (Herrman et al., 2011).

Herrman et al. (2011) conducted a comprehensive review of the literature and identified four domains of resilience: personal, biological, environmental factors, and the combined effects of the three. Personal factors associated with resilience included the personality factors a person possesses such as level of determination and ability to persevere. Biological factors included inherited biological processes of the mind and
body. For example, persons with biologically low levels of serotonin are more likely to become depressed which influences motivation and resilience. Environmental factors included support, education, and resources. Finally, the combined effects of the three components of resilience comprise the fourth component of resilience. For example, a person who has low levels of serotonin and has access to environmental resources such as healthy support system and access to medication to increase levels of serotonin has an advantage over someone who does not have these resources.

In general, resilience is defined in terms of the degree of psychopathology in a person who experienced negative life events. Fewer symptoms of psychopathology indicate higher levels of resilience (Miller, 2003). Miller conceptualized resilience as a construct that involves more than low levels of psychopathology after a significant trauma. It involves a person finding a degree of success and happiness in life despite negative situations. To be resilient a person does not need to accomplish magnificent feats. Living an average life and having moderate life satisfaction can constitute resilience.

Gillespie, Chaboyer, and Wallis (2007) studied resilience and proposed three components: hope, self-efficacy, and coping. Hope is the belief that a negative situation will work itself out. Self-efficacy is the belief in one’s ability to handle the situation. Coping involves engaging in certain behaviors to directly deal with the situation. This is similar to the definition M. Li and Nishikawa (2012) used to describe coping. Gillespie et al. (2007) and M. Li and Nishikawa (2012) viewed coping as separate from but related to resilience.
Andres-Lemay, Jamieson, and MacMillan (2005) also distinguished between coping and resilience. Coping is described as a process and resilience an outcome. Resilience implies a focus on an end result and coping implies a set of learned behaviors to help a person work through a situation. For example, if a person experienced trauma in childhood and went on to become a productive member of society, this would be considered resilience. Coping includes the strategies or interventions the person used to deal with the traumatic experience and the strategies they continued to use as they became productive members of society, for example, seeking resources and information to aid in obtaining job training and securing gainful employment.

The definition of resilience used in the current study was “the ability to bounce back from a variety of challenges that can arise in life” (Scali et al., 2012, p. 2). This means a person returns to prior levels of functioning after difficulty. This definition was chosen because it reflects the questions on the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) used in this study.

**Outcomes Associated With Resilience**

Resilience is associated with lower levels of mental illness, fewer physical health problems, and increases in life satisfaction (Scali et al., 2012). Ong, Zautra, and Reid (2010) studied resilience in relation to exaggerated estimates of pain. Those who had higher resilience scores also had lower reported levels of pain. Collishaw et al. (2007) studied resilience from the perspective of an absence of psychopathology in a population of adults who experienced child abuse. Results demonstrated that those with low levels of resilience also experienced more severe abuse in childhood. The negative outcomes
most frequently associated with abuse were low levels of resilience, depression, and anxiety.

Several studies have addressed the importance of protective factors in children who experienced abuse or neglect. Protective factors include relationships or experiences that help people to overcome painful events and to be successful in living an average life. Schultz, Tharp-Taylor, and Haviland (2009) studied these factors in those who were resilient and found that personal qualities such as strong social skills, healthy relationships, and the ability to adapt were associated with positive outcomes. In a similar study, Herrenkohl, Tajima, Whitney, and Huang (2005) also found that young adults who value education, are spiritual, and have peers and parents who value positive social behavior experienced resilience in the form of reduction of antisocial behaviors.

**Social Support**

The following section provides a discussion of definitions of social support, including the definition of social support chosen for the current study. Next, the differences between social support and social network are explored. The section concludes with a summary of outcomes associated with social support.

**Defining Social Support**

Barrera and Ainlay (1983) described social support as an important component of life satisfaction. The number and quality of relationships are important to a person’s wellbeing. The authors believed social support not only serves to protect against stress but helps a person to develop emotionally. There are several components of social support including the provision of material aid, behavioral aid, intimate interaction,
guidance, feedback, and positive social interaction. Instrumental aid includes giving or sharing objects, time, or money. Emotional aid involves assistance with a task. Intimate interaction happens when a person expresses care and concern and listens. Positive social interaction is a social interaction with the goal of enjoyment (Barrera & Ainlay, 1983).

Nurullah (2012) described social support as multifaceted and separate from a social network. Whereas a social network is a group to which one belongs but does not necessarily give or receive support, social support is assistance received from another person such as emotional or material support. A social network includes all of the people with whom one is acquainted, whereas social support is the group from which one uses as a resource in times of stress and concern. Social support is descriptive of quality relationships because of the equality of the give and take involved in the relationship (Nurullah, 2012). Received social support is the experience of having a friend or family member provide material items, time, information or emotional backing. Provided social support is the experience of giving a friend or family member material items, time, information or emotional backing (Nurullah, 2012; Shakespeare-Finch & Obst, 2011).

Given instrumental support involves donating time, money, or material items, such as food or clothing to another. Received instrumental support occurs when time, money, food, clothing, or information is provided. Given emotional support involves listening to and offering council to another. Received emotional support occurs when a friend or family member of a person attends to their feelings (Shakespeare-Finch & Obst, 2011). For the purpose of the current study, social support is defined as provided and
received instrumental and emotional support that is mutually desired by both the giver and the recipient.

**Outcomes Associated With Social Support**

Hupcey (1998) and Vangelisti (2009) are quick to note that most research focuses on the positive aspects of social support and negative aspects are minimized. There are many positive effects of social support. Raffaelli et al. (2012) conducted a study on the impact of social support on young adults. Mexican college applicants who had not yet been admitted to a university were used as the sample for the study. Researchers examined the relationship between social support, stress, and depression. Results showed a significant reduction in levels of depression among those who had the most social support. This may be because a social support network can provide information on the process of college applications, distractions from the anxiety of waiting on a reply, or alternatives for careers if the applicant did not gain admittance to the college.

The relationship between social support and reduced depression was demonstrated in other groups of people. Mohr, Classen, and Barrera (2004) found that high levels of social support were associated with lower levels of depression in persons with multiple sclerosis in the United States. It is important to note that the quantity of social relations was not a factor. A high quality social support network, one in which there was wanted, given and wanted received social support, did reduce symptoms of depression. This echoes the work of Hupcey (1998) and Vangelisti (2009) who emphasized the importance of quality over quantity in social support relationships.
Conversely, negative social support is at times well intentioned by the giver but unwanted or unneeded by the recipient. Hupcey (1998) and Vangelisti (2009) also theorized that a detrimental effect of social support could be that it causes distress because the person receiving support is aware that he or she has a need that is drawing the attention of others. An unhelpful attempt at support may stem from the potential supporter jumping to an untrue conclusion. This could result in feelings of anger or hurt on the part of the intended recipient of the support. Overall, the negative effects of given and provided social support include rejection of the supportive behavior or the supportive person and feelings of anger and resentment in both the giver and recipient of social support. Hupcey (1998) and Vangelisti (2009) noted that involvement in a social network can have negative effects when the network is experienced as coercive or when involvement becomes more costly than beneficial. Social networks can cause distress to an individual if the network rejects aspects of an individual or if the network depletes the resources of the individual for the betterment of the group.

**Relationships Between the Constructs**

Childhood trauma and life satisfaction have been studied separately with spirituality, resilience, and social support. However, no studies can be located on life satisfaction as an outcome in childhood trauma with spirituality, resilience, or social support. The next section provides an overview of the literature relevant to the relationships between the constructs. It concludes with a discussion of the need for the study of the combined constructs of life satisfaction, spirituality, resilience, and social support in those who have experienced childhood trauma.
Childhood Trauma and Life Satisfaction

Negative outcomes are associated with those who experienced childhood trauma. Research suggests that those with a history of childhood trauma have decreased levels of life satisfaction (Seitz et al., 2011) and lower stress tolerance later in life (Shmotkin & Lomranz, 1998). Young adults who experienced childhood trauma also experienced increased levels of suicidal ideation in young adulthood (Singh et al., 2012).

Seitz et al. (2011) studied the level of life satisfaction in adults who were diagnosed with cancer in childhood or adolescence. Even in adulthood this group still reported lower levels of life satisfaction. Cancer reoccurrence had no impact on life satisfaction. When this group was compared to the general population, their level of satisfaction still remained lower than average.

Shmotkin and Lomranz (1998) studied subjective wellbeing in Holocaust survivors. Living members of this group were children at the time of the Holocaust. The extent to which they experienced trauma impacted subjective wellbeing. For example, those who were the sole survivor of their family did not fare as well as those who survived with their families still intact. Those who disclosed their experiences to others had better adjustment than those who did not. The differences in groups may be due to differences in level of social support.

Singh et al. (2012) studied childhood trauma and later suicide risk in young adulthood. College students in India who experienced childhood trauma also experienced higher than average levels of suicidal ideation when compared to a group that did not
experience trauma in childhood. This provides further validation that childhood trauma has negative outcomes in those who experienced it.

Oishi and Sullivan (2005) studied life satisfaction in Asian Americans and European Americans and found that Asian Americans had parents who placed higher expectations on their children and the higher expectations led to lower satisfaction with life. High expectation of children is not the same as abusive behavior but when taken to the extreme can lead to some forms of abuse. For example, some parents use ridicule, threats, and name calling to motivate children to meet the parent’s high expectation. G. Parker et al. (1997) conducted a retrospective study on childhood experiences. Interviews were conducted with adults who described their childhood experiences. Themes that emerged suggested that certain childhood experiences positively correlated with mental health disorders in adulthood. More specifically, early loss of a parent, over protection, and poor parental mental health increased the likelihood of mood disorders in offspring. These studies suggest minor trauma in childhood may lead to problems later in life.

**Childhood Trauma and Spirituality**

Spirituality is an important part of the healing process for those who have experienced trauma. Many researchers have studied this phenomenon. P. L. Ryan (1998) conducted a study on spirituality in adult women who had experienced childhood trauma. Results suggested that those who experienced childhood trauma were more likely to change religions from the religion of their upbringing or avoid organized
religion. Although those who experienced childhood trauma had mixed feelings toward religion, most described themselves as spiritual.

In this same study, P. L. Ryan (1998) found the therapeutic benefits of spirituality to be a belief that a spiritual mediator, for example, God or a higher power, was responsible for helping them through the experience and helped them to heal from it. Spirituality provided a vessel for meaning making and offered comfort, hope, and support, and also contributed to feeling accepted and loved by a higher power. Spirituality seems to provide survivors of childhood trauma with some of the important elements they lacked in childhood such as unconditional love and support.

Similar to the results found by P. L. Ryan (1998), Galea (2008) studied the impact of child abuse on college students on the island of Malta and found that child abuse negatively impacts the degree to which a person is spiritual or religious. Those who experienced childhood abuse were more likely to be angry with God and avoided organized religions. Furthermore, many in this group did not describe themselves as spiritual. However, those in this study who were spiritual experienced a more positive affect than those who were not. He also found that those who experienced abuse or neglect tended to have negative thoughts about themselves, and experienced passiveness, detachment, and moodiness. This supports the work of Werner and Johnson (2004) who suggested that those who have experienced childhood trauma may be more likely to recognize unhealthy situations earlier than others and therefore withdraw from them to avoid becoming entangled in a damaging situation.
Childhood Trauma and Resilience

Many researchers have analyzed the relationship between resilience and trauma, including genetic influences, personality traits, and environmental factors. Research suggests that those with a biological predisposition to resilience, or trait resilience, recover from stressful events more easily than those with lower levels of trait resilience (M. Li & Nishikawa, 2012). Those with low levels of trait resilience were more likely to have an increase in hormones and brain chemicals associated with stress (Cicchetti & Rogosch, 2007; Hong et al., 2012). Environmental factors such as social support strongly negated the poor outcomes associated with childhood trauma (Egeland, Carlson, & Sroufe, 1993; Iwaniec, Larkin, & Higgins, 2006; MacMillan et al., 2001; Werner, 1992).

M. Li and Nishikawa (2012) studied active coping (when a person intentionally seeks solutions to problems) and resilience. All constructs were measured using psychometrically sound instruments. They found that those with higher levels of trait resilience had the ability to recover from stressful events faster, had a positive view of stressful situations, and were more likely to engage in active coping behaviors. These included trying to change a negative situation, actively problem solving, and seeking social support.

Similarly, Cicchetti and Rogosch (2007) found that personality factors and hormones associated with stress, like cortisol and dehydroepiandrosterone (DHEA), influenced resilience. Persons with higher levels of cortisol and DHEA had a decrease in stress resilience and were more likely to suffer the negative effects of stress such as damage to the brain, organs, and the balance of chemicals in the brain. Interestingly,
those who were more resilient were also described as controlled, reserved, and rational in their interactions with both peers and adults. This is similar to Galea (2008) and Werner and Johnson (2004) who found that those who experienced childhood trauma were withdrawn in their interactions with others. Cicchetti and Rogosch (2007) described the necessity of being reserved and controlled in order to survive the unpredictable situations that are involved with reoccurring traumatic events.

Hong et al. (2012) studied brain derived neurotropic factor (BDNF), a chemical associated with learning, brain, and neurological function, and found that those with a history of childhood trauma had lower levels of BDNF in the brain than those who experienced no childhood trauma. The use of antidepressants increased these levels. However, the group who experienced childhood trauma still had significantly lower levels of BDNF after three months on antidepressants. This suggests that childhood trauma alters the chemical makeup of a person, leading to negative mental health outcomes and lower levels of wellbeing in adulthood.

Similar to the results found by Hong et al. (2012), Van Harmelen et al. (2014) found that there are differences in the brain response to social exclusion in young adults who experienced verbal and emotional abuse and neglect. Participants who experienced emotional abuse had heightened and prolonged activity in the areas of the brain that control anxiety and depression. Brain responses were similar across the spectrum of severity of abuse and the result of the brain scans were corroborated with participant self-report of emotional distress.
Wang et al. (2010) found that 80% of adult heroin users in China reported a history of childhood abuse. Pan et al. (2012) found a variation in a specific gene in those who used heroin. Although this gene predisposed people to drug abuse at a young age, childhood trauma accounted for more of the variance. These studies suggest that although there is a genetic component to drug abuse, childhood trauma has a stronger influence on drug use than possession of the gene.

Resilience is a multifaceted construct comprised of both biological and personality traits. Many studies (Cicchetti & Rogosch, 2007; Pan et al., 2012; Wang et al., 2010) demonstrate that resilience is influenced by genetic makeup and that childhood trauma alters the body’s ability to create hormones that promote wellbeing and creates changes in the way the brain functions (Van Harmelen et al., 2014). Although several of these studies have found that chemical makeup accounts for a portion of resilience (Hong et al., 2012; Wang et al., 2010), there are personality traits (e.g., the ability to persevere) and motivational factors that can reduce the negative influences of childhood trauma (Stewart, 2011).

Dumont et al. (2007) approached resilience as an absence of psychological difficulty following abuse or neglect severe enough to be reported to legal authorities. Resilience was determined using an interview and self-report process 20 years after the abuse occurred. In this case, predictors of resilience involved a high level of intelligence, stable living situation, living in a middle class neighborhood, being in a relationship, and the absence of stressful events in the past year. In this study, women were more likely than men to be resilient, contradicting MacMillan et al. (2001).
Egeland et al. (1993) also described resilience as a process. They cited personal factors, such as having a supportive caregiver throughout difficult times and intelligence as necessary components of resilience. The concept of a supportive adult helping to diminish the negative effect of trauma is reinforced by others. Iwaniec et al. (2006) and Werner (1992) have also found that those who have a stable, supportive adult consistently available are more likely to be resilient in adulthood.

In a longitudinal study that followed children of alcoholic parents from birth through adulthood with periodic data collection, Werner (1992) described resilience as the ability to lead a typical life after the trauma of growing up with a substance abusing parent. Data collected when the participants were young adults demonstrated that educational achievement and spirituality were associated with positive outcomes such as the ability to maintain healthy adult relationships and a stable work record. In middle adulthood, educational achievement, spirituality, and a supportive mentor continued to be factors that positively influenced this same group of children of alcoholics (Werner & Johnson, 2004).

Similar to the findings of Werner (1992), Iwaniec et al. (2006) found that adults who were emotionally abused as children had more positive outcomes if, in childhood, they had a healthy relationship with one caregiver, had a limited number of abusive experiences, enjoyed school, had good peer relationships, and had a supportive relationship with an adult. This echoes the work of Ullman and Filipas (2001) who found limited exposure to trauma to be associated with positive outcomes.
Philippe, Laventure, Beaulieu-Pelletier, Lecours, and Lekes (2011) studied resilience as a mediator between abuse and poor psychological outcomes. They found that resilience served as a buffer for anxiety, depression, and self-injurious actions. The protective influence of resilience was stronger in regards to neglect and emotional abuse and was protective to a lesser extent in cases of physical and sexual abuse. Persons who experienced sexual abuse had higher rates of anxiety, depression, and self-injurious behavior, than those who did not experience abuse, despite having high levels of resilience.

The concept of resilience following childhood adversity has been the focus of much research. In most studies resilience or components of resilience are observed as outcomes such as level of success later in life. Many studies link childhood trauma with poor outcomes. Cicchetti, Rogosch, Lynch, and Holt (1993) studied school aged children who experienced abuse and neglect compared to a group who did not. Those who were abused experienced lower levels of resilience in the form of increased levels of anxiety, depression, aggressive behaviors, and disruptive behaviors and were more withdrawn than their peers. Lansford et al. (2006) studied resilience in school-aged children who experienced physical abuse. Children who experienced stressful situations early in childhood were more likely to exhibit increased levels of internalizing behaviors such as anxiety or depression. Those who grew up in a household where one parent made all of the decisions exhibited higher levels of externalizing behaviors including anger and aggression.
Afifi and MacMillan’s (2011) review of the literature showed that social support and personality characteristics, such as perseverance and determination, were strong predictors of resilience, whereas academic achievement was positively related to resilience, but to a lesser degree. Haskett, Nears, Ward, and McPherson (2006) compiled a list of protective factors in children who experienced abuse and neglect. Protective factors included personality characteristics, supportive family, and relationships with caring others. This supports the work of Afifi and MacMillan (2011) and Werner and Johnson (2004).

**Childhood Trauma and Social Support**

Trauma, and particularly trauma experienced in childhood, is associated with negative outcomes (Rellini & Meston, 2007; Sorbo et al., 2013). Social support has been widely studied as a buffer for the negative effects of trauma and has demonstrated effectiveness at minimizing poor outcomes associated with trauma (Seitz et al., 2011; Werner & Johnson, 2004). The following studies explore the relationship between social support and trauma.

Werner and Johnson (2004) interviewed persons in middle adulthood from their longitudinal study of children of alcoholics. The 2004 study included the cumulative results of the longitudinal study that showed those who displayed positive behaviors, such as the ability to maintain healthy relationships and the ability to set and achieve goals, in adulthood described several common factors of childhood. These included social relationships: a supportive adult, usually a teacher or parent of a friend involved in their lives, who encouraged and mentored them and close friendships with peers. Other
childhood factors that were associated with adult resilience included a relationship with a higher power, involvement in a church or spiritual community, and volunteering or working part-time. Those who were most successful later in life were well liked by peers and enjoyed school regardless of academic performance. As adults, the group that emerged as resilient tended to marry into families where there was no substance abuse and allowed their in-laws to take the role of parents and mentors. In adulthood this same group had a tendency to withdraw or emotionally detach from situations perceived to be emotionally harmful. This is similar to the findings of Galea’s (2008), Cicchetti et al. (1993), and Cicchetti and Rogosch (2007) that adults who were abused as children had a propensity to be controlled, withdrawn, and temperamental.

Dimitrova et al. (2010) conducted a study on close relationships and later psychological distress in adults who experienced childhood sexual abuse. Participants were recruited through agencies that specialized in providing assistance to those who experienced sexual abuse. The results of this study demonstrated a buffering effect of relationships. Those who had close relationships at the time of the trauma also had better levels of psychological functioning.

Fredrick and Goddard (2007) studied attachment and childhood trauma. They found adults who experienced childhood trauma had difficulty forming close relationships in adulthood. The results of this work are similar to those of Werner and Johnson (2004) and Galea (2008); that is, that childhood trauma leads to later difficulties with attachment. However, other research (Dimitrova et al., 2010; Fredrick & Goddard, 2007; Keller, Zoellner, & Feeny, 2010) suggested that it is possible for adults who have
experienced childhood trauma to form and maintain a social support network in adulthood. Additionally, this group actively sought a supportive network with which to engage. Werner and Johnson (2004) suggested that detachment occurs for members of this population when they recognize a situation as unhealthy. It is possible that people who experienced abuse or neglect are more readily able to recognize unhealthy situations because of their past experiences and therefore are able to avoid them.

Sagy and Dotan (2001) investigated factors that contributed to positive outcomes in Israeli children who had been exposed to abuse. Children who were abused had higher levels of psychological distress as compared to those who had not experienced abuse. Positive social support in terms of family and peer relationships dampened the negative effect of the abuse and led to lower levels of psychological distress when compared to a similar group who received less social support.

Overall, social support is an important component of long-term outcomes such as life satisfaction in people who experienced trauma in childhood. Several studies have been presented that indicate that a strong social support network serves as a protective factor in those who have experienced trauma in childhood.

**Life Satisfaction and Spirituality**

The relationship between life satisfaction and spirituality is consistently found in research. Those who have higher levels of spirituality are more satisfied with life in general. Even in the face of conditions that cause physical pain such as arthritis (Bartlett, Piedmont, Bilderback, Matsumoto, & Bathon, 2003) and those facing terminal illness
(Neimeyer et al., 2011), persons with increased levels of spirituality report being more satisfied with life than those with lower levels of spirituality.

Neimeyer et al. (2011) found that spirituality eased emotional suffering and increased acceptance of death in a group of terminally ill older adult participants. When participants reflected on their lives, many who expressed regret had an increased fear of death. Those who were spiritual had come to terms with any wrong-doing, tried to make amends for it, and asked for forgiveness. Both male and female participants described this process as a comfort that made it easier to accept the inevitability of their own death and to express less regret over life choices.

Bartlett et al. (2003) found that increased spirituality was associated with lower levels of physical distress in adults with arthritis. The results linked spirituality with increased happiness and a positive view of personal health despite severity of illness. Those who reported higher levels of spirituality had an increase in positive emotions and a decrease in negative feelings (Bartlett et al., 2003). Further validation for the link between spirituality and better physical and mental health was found by Konopack and McAuley (2012). Persons who reported high levels of spirituality also reported better mental health and to a lesser degree better physical health.

Perrone, Webb, Wright, Jackson, and Ksiazak (2006) studied spirituality and life satisfaction in gifted adults and found a positive correlation between spiritual well-being and life satisfaction. Participants in the study likened spirituality to life meaning and felt spirituality was akin to finding meaning in life and having a sense of direction.
Again, the distinction between religiosity and spirituality was apparent in the study by Perrone et al. (2006). Religiosity had no impact on life satisfaction. Spirituality was positively linked with life satisfaction and study participants reported spirituality contributed to feelings of resilience, harmony, and optimism. Feelings of confidence that problems would work out helped the participants through difficult times (Perrone et al., 2006).

Spirituality has been linked to life satisfaction in many groups. The overarching theme in the literature suggests the reason for this connection is the sense of meaning and purpose it provides to people.

**Life Satisfaction and Resilience**

Life satisfaction has been studied in relation to resilience. Barnes and Lightsey (2005) found those in the general population who had higher levels of resilience have lower levels of stress and higher levels of life satisfaction. Active problem solving, or the ability to search for solutions to problems, was related to increases in life satisfaction, whereas techniques that involved avoidance led to decreased life satisfaction.

R. M. Ryan, LaGuardia, and Rawsthorne (2005) examined the concepts of self-complexity and authenticity as components of resilience. Self-complexity involves the way a person describes the self and the aspects of the self such as relationships, circumstances, or activities and could also include life roles and personality attributes, such as motivation. Viewing the self as a multidimensional being rather than as one aspect of the self allows a holistic understanding of the self. Authenticity is the degree to which these personal descriptions are derived from the self versus imposed from an
outside source. Self-complexity and authenticity were both studied in relation to life satisfaction and resilience in college students. The results of R. M. Ryan et al. (2005) supported the hypothesis that an internally developed sense of self was strongly related to high levels of life satisfaction and resilience. Overall, those who were more resilient experienced higher levels of life satisfaction.

In a study on family resilience and marital life satisfaction in middle age, Huber, Navarro, Womble, and Mumme (2010) found a strong relationship between resilience, social support, and marital life satisfaction. Huber et al. (2010) and R. M. Ryan et al. (2005) explored the relationships between components of resilience and some form of wellbeing and found strong positive relationships, meaning resilience is positively related to measures of wellbeing such as life satisfaction. Neither of these studies examined the relationship between trauma, resilience, or life satisfaction. Instead, resilience was studied in a general population, which is contrary to the understanding of resilience as the outgrowth of adversity (Miller, 2003; Scali et al., 2012). Almedom (2005) recommended that resilience research should be interdisciplinary and focus on positive aspects that lead to resilience and life satisfaction after trauma.

Overall, there is not a wealth of research on life satisfaction and resilience in those with a history of childhood trauma. Many studies have examined depression as an outcome of childhood trauma (Chapman et al., 2004; Hovens et al., 2010; Jeon et al., 2009; Macmillan et al., 2001). Additionally, many studies have focused on objective outcome measures such as data on marital or employment status. These types of data do not give a sense of what it really means to be resilient. Subjective measures, including
self-report measures, are more accurate in assessing the construct of resilience and should be used over objective measures (Bromley, 2005; Crust, 2008; Kaufman, Cook, & Arny, 1994; O’Dougherty-Wright, Fopma-Loy, & Fischer, 2005). For the current study, a self-report measure of resilience, the Connor Davidson Resilience Scale, was used to determine level of resilience.

**Life Satisfaction and Social Support**

The impact of social support on life satisfaction has been demonstrated extensively in the literature (Fife, Adegoke, McCoy, & Brewer, 2011). Social support and life satisfaction were studied in a population of gay men in Spain. The most significant source of social support and life satisfaction was close friendships. Overall, a high level of life satisfaction was reported with this population although many reported they would change things if they could live their lives over. The correlation between support from a romantic partner and life satisfaction was greater than the correlation between general social support and life satisfaction. This means that in this sample most gay men did not feel social support from the typical sources of social support including friends and family; instead, social support was typically received from a romantic partner (Domínguez-Fuentes, Hombrados-Mendieta, & García-Leiva, 2012).

Along this same vein, Putzke, Elliott, and Richards (2001) found that married persons showed a higher level of life satisfaction than those who were single in a population of persons who suffered a debilitating spinal cord injury. The study, conducted one year post injury, demonstrated results similar to Domínguez-Fuentes et al.
In a study on the benefits of giving and receiving social support in a Chinese population, T. Li, Fok, and Fung (2011) discovered friendships were more reciprocal in terms of equally giving and receiving social support than family relationships. In interactions among family members, one person was always seen as a giver and the other as the receiver with the roles seldom changing. Friendships involved equal amounts of both giving and receiving of social support. Younger persons between the ages of 17 and 22 who had more reciprocal relationships also had higher levels of life satisfaction. Conversely, adults over the age of 61 benefitted most in terms of increased life satisfaction when they received more than they gave. This work has implications when analyzing the relationship between given and received support as a factor of life satisfaction.

Social support has been associated with life satisfaction in a number of studies on physical health. Pérez-Garcia, Ruiz, Sanjuán, and Rueda (2011) studied persons in Spain who recently experienced a heart attack, coronary spasm, or coronary blockage. Results showed that those with high levels of social support also had lower levels of depression and increased levels of life satisfaction. There were gender differences between men and women, with social support acting as a buffer to depression in men but not in women. This also parallels the findings of Park and Roh (2013) who found gender differences in the function and support of social network between men and women. Pérez-Garcia et al. (2011) explained that gender differences in their study may have been due to the role and
responsibility many women assume as a care giver. In this case, the benefits of the social network may not outweigh the demands, creating more stress for the individual.

The work of Small et al. (2011) illustrated the difference between chosen and assigned social support. A project was conducted to provide intentional support to new mothers who were at risk for intimate partner violence. The program paired at-risk mothers with mentor mothers. Mentor mothers included women who had young children in the home and were able to provide the at-risk mothers with information, resources, and were available to listen to the at-risk mothers. Results of the project showed that women were no better in terms of increasing social support or life satisfaction as a result of the program. This may be because people need to develop personal relationships with those with whom they can relate, not just persons assigned to them as mentors.

Social support, when sought from peers by an individual, has been associated with high levels of life satisfaction. In a study of injured college athletes in Lithuania, Malinauskas (2010) found that high levels of stress, severe injury, and low levels of social support were associated with low levels of life satisfaction. Young adults with higher levels of social support also had higher levels of life satisfaction.

Higher levels of social support were associated with high levels of life satisfaction in adolescents (Siddall et al., 2013) and children who had been removed from the home because of abuse or neglect in Brazil (Siqueira et al., 2011). Children and adolescents who were removed from the home because of abuse are vulnerable to the negative effects of childhood trauma. Their reported increased levels of life satisfaction as a result of strong relationships with others suggest the protective factors of social support.
Spirituality and Resilience

Several studies have addressed the connection between spirituality, resilience, and overall health and wellbeing. For example, Connor et al. (2003) found a positive correlation between resilience and better mental and physical health and a negative correlation between spiritual beliefs and better mental and physical health in a sample of adult survivors of trauma. High levels of anger were also associated with poor mental and physical health, and the ability to forgive did not contribute to wellbeing in survivors of trauma. The strong correlation between spiritual beliefs and poor mental health was an unlikely finding given the wealth of literature to the contrary. Researchers explained that spirituality emerged as a coping mechanism after trauma, rather than acting as a buffer prior to the stress. However, Connor et al. did not distinguish between the terms spiritual and religious belief, which may have influenced the outcome. Previous studies (Galea, 2008; P. L. Ryan, 1998) distinguished between spiritual and religious belief. They described how persons who have experienced trauma often feel ostracized by religion. Resilience was the strongest predictor of better physical and mental health in those who experienced trauma (Connor et al., 2003).

In juxtaposition to the theory of Connor et al. (2003) that spirituality has no protective features, Kim and Esquivel (2011) proposed that spirituality serves a protective role against negative life events. They cited the need to incorporate spiritual aspects to increase resilience in youth as this is a population that may greatly benefit from targeted prevention. Raftopoulos and Bates (2011) studied resilience in adolescents and found three components of spirituality that contributed to overall resilience: relationship with a
higher power, sense of meaning, and connection. These are similar to the dimensions of spirituality P. L. Ryan (1998) found in her research with women who experienced trauma.

Participants in Raftopoulos and Bates’s (2011) study described spirituality as having a relationship with a higher power. This relationship helped to make meaning out of life events, gave them a sense of purpose, and helped them to accept the outcomes more easily. Meaning making can be described as the ability to create opportunities or positive results from a negative event. Participants reported that in difficult times this relationship, the process of making meaning, and having a sense of purpose led to feelings of serenity (Raftopoulos & Bates, 2011).

Spirituality is important to understanding a person as a whole. It is a personal construct that has different definitions for each individual. The measure of spirituality used for the current study, the Assessment of Spirituality and Religious Sentiment (ASPIRES; Piedmont, 1999), measures spirituality as an individual’s expression of understanding of life. Spirituality provides individuals with feelings of certainty, strength, and faith in times of distress and assists with the journey through healing from trauma, illness, and difficulty.

**Spirituality and Social Support**

In a study of Korean American immigrant women survivors of cancer, Lim and Yi (2009) found that spirituality and religiosity each had minimal impact on quality of life, but together lowered levels of depression and anxiety and increased levels of overall quality of life. The interaction of social support and spirituality significantly increased
overall quality of life. The researchers described religion and spirituality as particularly important to this population and theorize religion and church are a form of social support to this group, especially the immigrants who may use religion as a comfort and familiarity in a new country (Lim & Yi, 2009).

The role of spirituality and social support was studied in a group of women with human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS; Peterson, 2011). Results demonstrated the distinction between spirituality and religiosity. A few of the participants did not affiliate with a religion because of feelings of being judged. These women reported a spiritual connection with a higher power that was used as a source of support. For others, affiliation with religion provided a social network that the women described as supportive and membership helped the women gain information, feel important or part of something bigger (Peterson, 2011). Peterson believed that people use the religious community as a source of social support leading to the link between the two constructs.

In a study on social support, religiosity, and mental health, Corrêa et al. (2011) found that older adults who had higher levels of religious involvement also had a lower occurrence of mental health disorders regardless of religious orientation or level of religiosity. Results also demonstrated higher levels of social support were positively associated with higher levels of religiosity.

Lim and Yi (2009) and other researchers (Park & Roh, 2013; Park, Roh, & Yeo, 2012; Zini, Sgan-Cohen & Marcenes, 2012) demonstrated the transcultural constructs of spirituality, social support, and life satisfaction. The researchers all studied the
relationships between spirituality, social support, and life satisfaction and found similar results, increased levels of spirituality and social support correlate with increased levels of life satisfaction. There seems to be a universal desire to attain some level of life satisfaction; seeking spiritual and socially supportive situations is a vehicle to achieve life satisfaction.

Park and Roh (2013) studied spirituality, social support, and depression in Korean immigrants. The results of this study demonstrated a positive relationship between spirituality and lower levels of depression, level of spirituality mediated this relationship. In this study social support was measured in terms of social network, which may have influenced the results of the study. Previous researchers (Hupcey, 1998; Nurullah, 2012; Vangelisti, 2009) have all described the differences between social support and social network, since social networks sometimes demand more from a person, in terms of time, money, or resources, than they give. It is possible for them to increase levels of depression. Also, Peterson (2011) acknowledged the use of the religious community as a social network. In the case of the study done by Park and Roh (2013), it is possible social network was measured twice—once as spirituality and once as social support. This may account for the strong correlation between the two factors. Park and Roh noted gender differences between males with females report lower levels of both spirituality and affiliation with a social network. The authors explained the differences may be due to the way the term spirituality translates into Korean.

Park et al. (2012) studied religiosity, social support, and life satisfaction in a population of Korean immigrants. Religiosity and social support positively related to life
satisfaction. The results of this study also showed an increase in life satisfaction was associated with older age, better health, and higher income. The more active one is in one’s religion and the more social support one has, the more that person is satisfied with life. Social support was the mediating factor between religiosity and life satisfaction. Spirituality was not associated with social support, but social support in this study was actually a measure of social network. Other researchers have theorized the link between spirituality and social support is strong because people use religious networks as social support (Peterson, 2011), which may be the case in Park et al.’s (2012) study since the focus of the study was religious involvement as opposed to spirituality.

Paranjape and Kaslow (2010) found that both spirituality and social support predicted high levels of psychological functioning in African American women over 50 years old who had been exposed to family violence in adulthood. Spirituality, but not social support, was positively correlated with physical health in this population.

**Resilience and Social Support**

Social support has been studied in relation to trauma and resilience from trauma. Social support was studied as a buffering agent against PTSD in American veterans returning from Iraq and Afghanistan (Tsai et al., 2012). Soldiers who had increased scores on a measure of PTSD reported unsupportive family life in both family of origin and family of choice, as well as lower levels of life satisfaction. It is possible that early traumatic experiences predispose people to a more severe reaction to stress later in life.

In a study of Nigerian adolescents responses to violence, Salami (2010) found youth who experienced high levels of resilience, self-esteem, and social support also
experienced lower levels of PTSD as a response to violence. This suggests that resilience, self-esteem, and social support act as protective factors against the negative effects of trauma.

Migerode, Maes, Buysse, and Brondeel (2012) studied resilience, social support, and quality of life in adolescents with disabilities and their parents. They found that parents who had high levels of social support perceived their quality of life to be higher than it actually was. The adolescents reported a lower quality of life and less social support than their parents. This study supports the work of Seitz et al. (2011) and Tsai et al. (2012) in that early childhood trauma may lead to lower stress tolerance later in life. It also supports the work of Diener et al. (1985), who found that life satisfaction is a stable construct in adults but is influenced by trauma during the formative years.

**Purpose of the Current Study**

The purpose of the current study was to determine the extent to which spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma. Several studies link the experience of childhood trauma to mentally unhealthy behaviors in adulthood (Chapman et al., 2004; Sachs-Ericsson et al., 2006). Many researchers have attempted to link certain behaviors with positive outcomes in adults who experienced childhood trauma. Among these factors are life satisfaction (Pitzer & Fingerman, 2010), spirituality (Galea, 2008), resilience (DuMont et al., 2007; Herringshaw, 1997), and social support (Fredrick & Goddard, 2007; Werner & Johnson, 2004). Other researchers have investigated the combination of spirituality and resilience (Connor et al., 2003; Kim & Esquivel, 2011; Raftopoulos & Bates, 2011).
No study was found that addressed the combined factors of spirituality, resilience, social support, and life satisfaction in young adults who experienced childhood trauma. Several authors suggested the benefits of studying these positive factors in conjunction with each other. Wills and Bantum (2012) suggested that resilience be studied with trauma, social support, and disposition. Armstrong, Birnie–Lefcovitch, and Ungar (2005) added that social support should be studied in relation to resilience. The current study aims to determine the extent to which spirituality, resilience, and social support are predictors of life satisfaction in those who experienced childhood trauma. The research question for the current study is: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma?

Research Hypothesis: Levels of spirituality, resilience, social support, sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Null Hypothesis 1: Levels of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling do not predict the degree of life satisfaction in young adulthood.

Null Hypothesis 2: Levels of spirituality, resilience, and social support do not predict degree of life satisfaction in young adulthood, after controlling for the variables in Null Hypothesis 1.

Alternate Hypothesis 1: Variables of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous
experience in counseling predict the degree of life satisfaction in young adulthood after controlling for the variables of spirituality, resilience, and social support.

Alternate Hypothesis 2: Variables of spirituality, resilience, and social support predict the degree of life satisfaction in young adulthood not explained by the variables of sex, age, ethnicity, relationship status, education, experience of childhood trauma, and previous experience in counseling.

Chapter Summary

Childhood trauma has long been associated with negative outcomes in adulthood not only for the individual in the form of physical or mental health problems but also for society in the form of an increase of criminal behaviors (Chapman et al., 2004; Sachs-Ericsson et al., 2006). Although childhood trauma has been associated with negative outcomes, researchers have examined those who have experienced positive outcomes despite the experience of childhood trauma. Those in late adolescence and young adulthood have already formed a stable level of life satisfaction that will continue throughout adulthood (Diener et al., 1985). The constructs of life satisfaction (Pitzer & Fingerman, 2010), spirituality (Galea, 2008), resilience (DuMont et al., 2007; Herringshaw, 1997), and social support (Fredrick & Goddard, 2007; Werner & Johnson, 2004), have been associated with positive outcomes in those who have experienced childhood trauma. These protective factors emerge in adolescence and remain stable throughout adulthood. Some of these factors have been studied in conjunction with each other including spirituality and resilience (Connor et al., 2003; Kim & Esquivel, 2011; Raftopoulos & Bates, 2011).
This chapter provided an overview of the relevant literature on childhood trauma, life satisfaction, spirituality, resilience, and social support. The constructs have previously been studied separately but not in relation to each other. Multiple studies have demonstrated the relationship between childhood trauma and negative outcomes. Further evidence suggests the protective effects of spirituality, resilience, and social support. These constructs were related to mental and physical health and wellness. The comprehensive review of the literature presented in this chapter provides further rationale for the current study. Chapter 2 provides an explanation of the purpose and rationale, participants, instruments, procedures, research methodology, and data analysis of the current study.
CHAPTER II

METHODOLOGY

This chapter explains the methods used in the current study. It provides information on the purpose of the study, research question, instruments used including reliability and validity. Procedures are described such as inclusionary criteria, exclusionary criteria, participants, and sampling. Finally, the data analysis used for the current study is discussed.

Purpose and Rationale of the Study

As stated in Chapter 1, there is overwhelming evidence that the experience of childhood trauma has negative repercussions in adulthood (Jeon et al., 2009; Macmillan et al., 2001; Norman et al., 2012). There is also evidence that spirituality (Neimeyer et al., 2011; Piedmont, 2004; P. L. Ryan, 1998), resilience (Cicchetti et al., 1993; Jiménez Ambriz, Izal, & Montorio, 2012; Lansford et al., 2006), and social support (Lim & Yi, 2009; Park & Roh, 2013; Park et al., 2012) increase the potential for positive outcomes such as life satisfaction, in persons who experienced childhood trauma (Arrindell et al., 2001; Diener et al., 1999; Seitz et al., 2011).

To date, no single study has been located that addresses the combined factors of spirituality, resilience, and social support in relation to overall life satisfaction in young adults who experienced childhood trauma. Wills and Bantum (2012) recommended studying resilience in conjunction with other factors, such as trauma, social support, and personality traits such as resilience. Armstrong et al. (2005) echoed this sentiment and added that the shielding effects of social support need to be studied in relation to
resilience. Further, there is evidence that life satisfaction is a stable construct from young adulthood on (Diener et al., 1985); therefore, a population of young adults was chosen for the current study.

The aim of the current study was to examine the factors of spirituality, resilience, and social support relative to overall life satisfaction in young adults who experienced childhood trauma. The research question for the current study was: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma?

Research Hypothesis: Levels of spirituality, resilience, social support, sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Null Hypothesis 1: Levels of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling do not predict the degree of life satisfaction in young adulthood.

Null Hypothesis 2: Levels of spirituality, resilience, and social support do not predict degree of life satisfaction in young adulthood, after controlling for the variables in Null Hypothesis 1.

Alternate Hypothesis 1: Variables of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood after controlling for the variables of spirituality, resilience, and social support.
Alternate Hypothesis 2: Variables of spirituality, resilience, and social support predict the degree of life satisfaction in young adulthood not explained by the variables of sex, age, ethnicity, relationship status, education, experience of childhood trauma, and previous experience in counseling.

**Participants**

After receiving approval from the Institutional Review Board (IRB) at Kent State University (see Appendix A), participant recruitment began at Kent State University. Potential participants were recruited by obtaining a random selection of email addresses of young adults between the ages of 18 and 30 who had taken or were currently taking courses at Kent State University that was obtained from the Department of Institutional Research at Kent State University. The initial list included 6,101 electronically generated email addresses. For the purposes of the current study, young adult was defined as an adult between the ages of 18 and 30. All participants were recruited via an email invitation to participate in the online survey. Participation in this online study was voluntary.

**Instrumentation**

The following section provides information about each of the instruments used in the current study. Included are a demographics questionnaire, the *Satisfaction with Life Scale* (SWLS; Diener et al., 1985), the *Connor-Davidson Resilience Scale 10* (CD-RISC-10; Connor & Davidson, 2003), the *Assessment of Spirituality and Religious Sentiments* (ASPIRES; Piedmont, 1999), and the *2-Way Social Support Survey* (2-Way
SSS; Shakespeare-Finch & Obst, 2011). Information on the development, reliability, and validity of each instrument is included.

**Demographics Questionnaire**

A demographics questionnaire (see Appendix B) was created to obtain information on sex, age, ethnicity and race, relationship status, education, childhood trauma, and previous counseling experience. The self-report of childhood trauma included scaling questions to determine perceived level of severity and frequency of trauma. Participants were asked the perceived benefit of counseling if they answered that they had previously attended counseling.

Items in the demographics questionnaire were included because of research findings. Research (Park & Roh, 2013; Perez-Garcia et al., 2011) suggests gender differences in the experience of social support; therefore, it was included as a question. T. Li et al. (2011) described differences in the experience of social support based on age; therefore, age was included. The question on ethnicity was included because research indicates that life satisfaction is stable across cultures (Paranjape & Kaslow, 2010; Pavot & Diener, 2008). Dominguez-Fuentes et al. (2012), Fife et al. (2011), and Putzke et al. (2001) found that those who were in a romantic partnership reported higher levels of life satisfaction; therefore, this was included as a demographic question. Research has also shown that those with a higher level of education have a higher level of life satisfaction (Arrindell et al., 1991; Diener et al., 1999).

Participants were asked about their history of childhood trauma because research supports that those with a history of childhood trauma have poor mental health outcomes,
such as anxiety and depression, in adulthood (Chapman et al., 2004; Hovens et al., 2010). Runyan et al. (2005) recommended that abuse be defined by the perceptions of the victim because the perceived severity of trauma often impacts the individual as much as the actual severity of the trauma. Seides (2010) emphasized the cumulative effects of microtraumas, thought to be more detrimental than a single traumatic event, regardless of severity. Therefore, questions regarding frequency and severity of childhood trauma were included. The question about previous counseling and the helpfulness of the experience was added to determine how previous counseling experiences may have influenced the life satisfaction, spirituality resilience, and social support.

Definitions of abuse and examples of trauma were included in the recruitment email and the demographics questionnaire. Trauma had to occur before the age of 18. Childhood trauma is defined as serious illness in the family, death of an immediate family member, or involvement in a life-threatening situation. Trauma also includes physical, emotional, and sexual abuse. Physical abuse includes a care giver intentionally causing physical harm to a child (Paavilainen & Tarkka, 2003). Emotional abuse is defined as neglecting, controlling, coercing, threatening or otherwise psychologically harming a child. This includes threats or manipulations directed at the child (Hamarman & Bernet, 2000). Sexual abuse involves unwanted sexual contact (Trickett et al., 2009).

The Satisfaction with Life Scale

Life satisfaction, a level of contentment with life, is a subjective construct influenced by a person’s general feelings about life. The construct remains stable over time, and is mildly influenced by life situations (Diener et al., 1985). A negative event
will negatively influence a person’s level of life satisfaction and a positive event will positively influence level of life satisfaction, but this change is not permanent (Pavot & Diener, 2008). Pavot and Diener (1993) described this as a balance between stability and sensitivity of the *Satisfaction with Life Scale* (SWLS; Diener et al., 1985; see Appendix C). The instrument is in the public domain and no permissions are needed to use it (Smiley, 2009). The SWLS is stable as it measures a construct within a person yet sensitive enough to detect changes due to positive and negative events. It is not typical for a person to make extreme changes in level of life satisfaction over time.

The SWLS consists of 5-items; each item is rated on a Likert scale with 1 representing a low level of satisfaction and 7 representing a high level of satisfaction. The overall mean score for the SLWS is 23.5 with a standard deviation of 6.43 with possible scores on this measure ranged from 5–35 with 5 being low life satisfaction and 35 being high life satisfaction. Scores of 5–9 represent *extreme dissatisfaction* with life, 15–19 *slight dissatisfaction*, 21–25 *slight satisfaction*, 26–30 *satisfaction*, and 31–35 represent *extreme satisfaction*. A score of 20 is considered to be *neutral*, meaning the person is neither satisfied nor dissatisfied with life (Diener et al., 1985).

**Development of the SWLS.** The SWLS (Diener et al., 1985) was developed to measure overall satisfaction with life based on a person’s subjective standard of satisfaction rather than an externally imposed standard of life satisfaction (Diener et al., 1985; Pavot, Diener, Colvin, & Sandvik, 1991). The SWLS measures a person’s life satisfaction separate from current mood, although it is sensitive enough to detect changes due to life events.
The scale was developed from a list of 48 components of life satisfaction. These were then systematically eliminated based on factor loadings. The resulting 5-item instrument was then tested for validity and reliability. Diener et al. (1985) do not reference the source of the initial 48 items from which the SWLS was developed.

The SWLS has been subjected to three norming groups. The first two groups consisted of traditional college age students at a large Midwest university, and the third norming group consisted of older persons who lived in the university community and surrounding area. Information on socioeconomic status, race, ethnicity, or gender of the initial three norming groups was not reported (Diener et al., 1985).

**Validity and reliability of the SWLS.** Diener et al. (1985) demonstrated the test-retest reliability of the SWLS on a population of 175 undergraduate students enrolled in an introductory psychology course at a large Midwestern university. The instrument was then administered to the same group again two months later resulting in a correlation coefficient of $r = .82$ and an alpha cutoff of $\alpha = .87$ (Diener et al., 1985). Michalos and Kahlke (2010) found scores on the SWLS remained stable over time with a correlation of $r = .75$ over a 2-year period, with $r = .80$ for year-to-year correlations.

The SWLS has moderate internal consistency. The item total correlations for each of the five items range from .61 to .81: For item 1 (“In most ways, my life is close to ideal”), the internal consistency is .81. For item 2 (“The conditions of my life are excellent”), the item total correlation is .63. The item total correlation for 3 (“I am completely satisfied with my life”) is .61. The item total correlation for item 4 (“So far I have gotten the most important things I want in life”) is .75. Finally, the item total
correlation of item 5 (“If I could live my life over, I would change nothing”) is .66 (Diener et al., 1985).

Diener et al.’s (1985) research established concurrent validity, of the SWLS with other measures of life satisfaction. Based on this study, the SWLS was found to correlate with The Self-Esteem Scale (Rosenberg, 1965; \( r = .54 \)); The Life Satisfaction Index (Neugarten, Havighurst, & Tobin, 1961; \( r = .46 \)); and a life satisfaction interview (\( r = .43 \)). The level of significance for these correlations was not reported.

Since its creation, the SWLS has been widely used with persons of multiple backgrounds and from various cultures and has been translated into several languages. The mean scores and standard deviation for the SWLS with other populations are similar to the mean scores and standard deviations from the original study conducted in the United States (Pavot & Diener, 2008). Pavot and Diener described several of the populations studied: British adults’ mean scores range from 23.0 to 24.4 and standard deviation ranges from 6.7 to 6.9 (Hayes & Joseph, 2003; Maltby & Day, 2004), Dutch adults (Arrindell, Heesink, & Feij, 1999; Van Loon, Jeanne, Tijhuis, Surtees, & Ormel, 2001), Australian adults and adolescents (Gannon & Ranzijn, 2005; Palmer, Donaldson, & Stough, 2002), Spanish college students’ mean score is 24.4 and standard deviation of 5.6 (Extremera & Fernández-Berrocal, 2005), Taiwanese college students (Wu & Yao, 2006), Japanese college students (Oishi & Sullivan, 2005), Korean college students (Jeon et al., 2009), African American college students in the United States with a mean score of 22.4 and standard deviation of 6.4 (Barnes & Lightsey, 2005), female college students in the United States (Chang, Watkins, & Banks, 2004), French Canadian college students
(Tremblay, Blanchard, Pelletier, & Vallerand, 2006), Kenyan Maasai people
(Biswas-Diener, Vitterso & Diener, 2009), and Amish and Inughuit adults
(Biswas-Diener et al., 2009).

The SWLS has been used with mental health populations, including persons with
severe traumatic brain injury and post-traumatic stress disorder (Bryant, Marosszeky,
Crooks, Baguley, & Gurka, 2001), psychiatric patients (Arrindell et al., 2001), caregivers
of people with Alzheimer’s disease (Vitaliano et al., 1995), and Holocaust survivors
(Shmotkin & Lomranz, 1998). Life satisfaction has frequently been studied in
populations with chronic illnesses, persons with spinal cord injury (Elliott, Shewchuk,
Miller, & Richards, 2001; Putzke et al., 2001), patients awaiting lung transplantation with
a mean of 18.8 and a standard deviation of 8.4 (Rodrigue, Kanasky, Marhefka, Perri, &
Baz, 2001), cancer patients experiencing bone marrow transplant (Courneya, Keats &
Turner, 2000), Dutch medical patients $MS = 23.6$ and $SD = 7.0$ (Arrindell et al., 1991),
people with irreversible vision loss with a mean of 25.6 and a standard deviation of 6.2
(Dreer, Elliott, Fletcher, & Swanson, 2005), people with diabetes (Senécal, Nouwen, &
White, 2000), and the partners of persons with fibromyalgia syndrome (Bigatti & Cronan,
2002).

In another study, the SWLS was found to correlate highly with several
instruments. The convergent validity of the SWLS with the Life Satisfaction Index was
reported at $r = .81$; with the Philadelphia Geriatric Center Morale Scale (Lawton, 1975;
$r = .65$); and The Fordyce Global Happiness Scale (Fordyce, 1978; $r = .65$; Pavot et al.,
1991). Overall, the SWLS is a sound instrument that can be used to measure a person’s
feelings about his or her life satisfaction and correlates with other measures of life satisfaction, positive and negative affect, and external reports of these measures.

Based on numerous studies that have demonstrated the relevance of the SWLS with persons from a variety of backgrounds, it appears to be a sound instrument to measure the degree of a young adult’s satisfaction with life. The mean scores and standard deviation of the SWLS remained stable across these study populations, demonstrating the appropriateness of the instrument for use with multiple populations including young adults.

**Assessment of Spirituality and Religious Sentiments**

Important to the development of *the Assessment of Spirituality and Religious Sentiments* (ASPIRES; Piedmont, 1999) is the distinction between religiosity and spirituality. Since its construction, the ASPIRES has been used by many researchers to measure spirituality as a person’s ability to create connection and meaning with all living things, boundless of time and space, and distinct from religiosity as a personality construct. Permission to use the ASPIRES for the current study was obtained (see Appendix D).

The ASPIRES (Piedmont, 2004) short form, used for the current study, is a 9-item scale. The ASPIRES short form measures 4 aspects of spirituality (Piedmont, 2001): prayer fulfillment (3 items), universality (3 items), connectedness (3 items), and global transcendence (9 items). Global transcendence is the measure of total spirituality and includes all items from each of the subscales for a total of 9 items. For the current study the 9 items that comprise global transcendence were used. Prayer fulfillment is the inner
peace that comes from prayer or meditation. Universality pertains to the belief in a common shared experience among people. Connectedness is the feeling that all people are united as part of something bigger that transcends time and culture. Finally, religiosity is the extent to which a person is involved in religion, for example, involvement in prayer services and religious community, and global transcendence is the overall spirituality score. The overall spirituality score is obtained by adding the scores from the 9 items that make up the subscales of prayer fulfillment, connected, and universality (Piedmont, 2001). The ASPIRES is available in two forms: a self-report form and an observer report form (Piedmont, Kennedy, Sherman, Sherman, & Williams, 2008). In the current study, the ASPIRES short form self-report was administered and only the overall spirituality score, global transcendence, was used.

**Development of the ASPIRES.** The ASPIRES (Piedmont, 2004) short form contains 13 items and was derived from the ASPIRES long form, a 23-item instrument used to measure spirituality (Piedmont et al., 2008). Items on the ASPIRES long form that correlated highly with items on the personality measures were omitted through a multistep process of analysis resulting in the 23 item instrument. The reliability for connectedness was $\alpha = .65$, universality was $\alpha = .80$, and prayer fulfillment was $\alpha = .85$. Congruence coefficients were calculated based on the observer rating of spiritual transcendence and participant rating of their own transcendence. Congruence coefficients on the participant rating of their own spirituality were: Universality ($R_V = .98$), Prayer fulfillment ($R_V = .96$), and Connectedness ($R_V = .87$; Piedmont, 1999).
The ASPIRES long form had a low correlation with personality instruments demonstrating its independence from measures of personality. Conversely the ASPIRES long form correlated highly with measures of Attitudes toward Abortion, Internal Health Locus of Control, Vulnerability to Stress, Perceived Social Support, Pro-social Behavior, Sexual Attitudes, and Interpersonal Orientation demonstrating its measurement of belief systems (Piedmont, 1999).

The ASPIRES short form was developed to accommodate people with attentional concerns due to grief or post-traumatic stress. It is also convenient when used as part of a lengthy battery of tests, to allow for timely completion (Piedmont et al., 2008).

**Validity and reliability of the ASPIRES.** The ASPIRES short form self-report, a 13-item instrument, was normed on two groups. The first group consisted of 377 persons who ranged in age from 15-90. Participants included female ($n = 252$), male ($n = 125$), White ($n = 257$), Catholic ($n = 200$) persons who were employed full time ($n = 204$) and were college educated ($n = 351$). The second group consisted of 309 participants ranging in age from 18–42. Participants included Caucasian ($n = 257$) persons who were working towards a college degree ($n = 309$). Religious backgrounds included Christian, atheist, agnostic, and other faiths (Piedmont et al., 2008).

Alpha values on the ASPIRES 9-item scale for the first sample group were .88 for prayer fulfillment, .61 for universality, .66 for connectedness, .84 for religiosity, and .72 for total transcendence. Alpha scores for the second group were .92 for prayer fulfillment, .60 for universality, .76 for connectedness, .79 for religiosity, and .72 for
global transcendence. These scores demonstrate good internal consistency of the ASPIRES self-report short form (Piedmont et al., 2008).

Brown, Chen, Gehlert, and Piedmont (2012) studied age and gender and found that neither had an impact on the factor structure of the ASPIRES short form. The way a person expresses spirituality may change over time; however, the internal experience and understanding of it remains stable over time. For example, a person may choose to express spirituality by focusing on meditation at one point in his or her life and through service to others at another point in his or her life. No matter how that person chooses to express his or her spirituality, the underlying motivating factors and experience of it remain the same.

**Connor-Davidson Resilience Scale 10**

The *Connor Davidson Resilience Scale 10* (CD-RISC 10; Connor & Davidson, 2003) and its forerunner the *Connor Davidson Resilience Scale* (CD-RISC) are sound self-report measures of resilience. Unlike other ways of measuring resilience, the CD-RISC 10 does not use objective measures of resilience, which may be misleading (Kaufman et al., 1994). Objective measures are measures that use externally imposed values. The CD-RISC-10 measures subjective feelings of resilience. In a review of several resilience measures, Windle, Bennett, and Noyes (2011) found that the CD-RISC has been one of the strongest resilience measures in terms of validity and reliability. Additionally, the CD-RISC has been used to study resilience when associated with trauma. Scali et al. (2012) used the CD-RISC to measure resilience in women who experienced trauma in adulthood. High resilience scores correlated with high levels of
mental health (Kinard, 1998). Permission to use the CD-RISC 10 for the current study was obtained (see Appendix E).

The Connor-Davidson Resilience Scale 10 (CD-RISC 10; Connor & Davidson, 2003) was developed from the 25-item Connor-Davidson Resilience Scale 25 (CD-RISC 25; Connor & Davidson, 2003). It was developed to measure psychological hardiness and provides a score for overall resilience.

The CD-RISC 10 contains 10 items, each with 5 response options ranging from Not true at all to True nearly all of the time. The total possible score on the instrument is 40, representing high resilience. A score of 0 represents low resilience. The mean score for the test population was 27.21 with a standard deviation of 5.84 (Campbell-Sills & Stein, 2007). The CD-RISC 10 was normed on 1,743 undergraduate students at a large west coast university with a mean age of 18.8 (SD = 2.2). Norming group members included White, Latino, Filipino, Asian, African American, Native American, and other cultural groups (Campbell-Sills & Stein, 2007).

The development of the CD-RISC 10. The CD-RISC 10 (Connor & Davidson, 2003) was developed from the 25-item CD-RISC, which was normed on five populations of people living in the United States. Group 1 consisted of 577 participants from a random community sample. Group 2 consisted of 139 psychiatric patients. Group 3 were 43 people participating in an unrelated study on generalized anxiety disorder at the time they participated in the research. Groups 4 and 5 consisted of 22 members who were involved in an unrelated study on post-traumatic stress disorder at the time of instrument completion (Connor & Davidson, 2003).
Groups 1–5 \((n = 806)\) included 510 female participants and 274 male participants; 588 of the participants were White and 181 were non-White with a mean age of 43.8 \((SD = 15.3)\). The age and standard deviation are based on 763 participants because not all participants completed the demographic questionnaire in its entirety. Mean scores were 77.1 for women, 77.2 for men, 76.7 for non-White participants, and 77.4 for White participants (Connor et al., 2003).

**Validity and reliability of the CD-RISC 10.** The test-retest reliability had a high correlation at \(r = .87\). The CD-RISC correlated highly with Kobasa’s (1979) *Measure of hardiness* \(r = .83 \,(p \leq .0001)\) and the Sheehan Social Support Scale (D. V. Sheehan, Raj, Sheehan, & Soto, 1990) \(r = .36 \,(p \leq .0001)\). The measure correlated negatively with *The Perceived Stress Scale* (Cohen, Kamarck, & Mermelstein, 1983) \(r = -.76 \,(p \leq .001)\) and the *Sheehan Stress Vulnerability Scale* (D. V. Sheehan et al., 1990) \(r = -.32 \,(p \leq .000;\) Connor & Davidson, 2003). The strong negative correlations with the stress scales, combined with the strong positive correlations with the hardiness and support scales, suggest that the CD-RISC measures the construct of resilience.

The CD-RISC 25 was refined through a series of analyses of content. Several items were omitted because of inconsistent factor loadings, too few items to measure the construct, and multiple themes within the same item. The result of the analyses was a 10-item instrument that succinctly measures the single factor of resilience (Campbell-Sills & Stein., 2007; Connor & Davidson, 2003). Chronbach’s alpha for the CD-RISC 10 was \(\alpha = .85\) demonstrating the good internal consistency of the 10-item instrument. The
CD-RISC 10 correlated highly with the CD-RISC 25 at $r = .92$ (Campbell-Sills et al., 2007).

The CD-RISC 10 was selected as a measure of resilience for the current study, because of all reviewed instruments, it most clearly defines resilience and most accurately measures the construct. The instrument was developed in a highly scientific manner and has been used in multiple research studies since its creation.

**The 2-Way Social Support Survey**

The 20-item 2-Way Social Support Survey (2-Way SSS; Shakespeare-Finch & Obst, 2011; See Appendix F) measures receiving emotional support (7 items), giving emotional support (5 items), receiving instrumental support (4 items), and giving instrumental support (4 items). Emotional support can be described as being available to give advice, comfort, and share with another. Instrumental support includes helping with a task, lending money, and giving information (Shakespeare-Finch & Obst, 2011). Permission to use the 2 Way-SSS for the current study was obtained (see Appendix G).

Each item has six response choices from 0–6, with 0 representing *not at all* or this never happens and 6 representing *always* or this always happens. Participants are instructed to rate the degree to which they agree with each statement. Higher scores on the instrument indicate higher levels of giving and receiving social support.

**Development of the 2-Way SSS.** The 2-Way SSS was developed following the traditional guidelines for scale development. It was created from an initial pool of 56 items derived from a content analysis of several measures of social support and tested on 436 undergraduate students in Queensland Australia (Shakespeare-Finch & Obst, 2011).
The factors that emerged were giving social support, receiving social support, giving instrumental support, and receiving instrumental support.

The four-factor scale went through a confirmatory factor analysis (Shakespeare-Finch & Obst, 2011) and one item was removed because of inconsistent factor loadings. The goodness of fit was analyzed using several statistical analyses, the results, $X^2(N = 417, 169) = 309.14, p < .05; \text{CFI} = .97; \text{GFI} = .94$ (Shakespeare-Finch & Obst, 2011), demonstrated that the items each had an acceptable model fit. The resulting 29 items were then normed on two population samples. Samples 1 were 372 adults between the ages of 17 and 81 living in and around the Queensland Australia area including: 237 female, 118 male, and 17 did not select a response. Sample 2 consisted of 417 adults between the ages of 17 and 68 in the Queensland Australia area including: 289 females and 128 males (Shakespeare-Finch & Obst, 2011).

An exploratory factor analysis of the 29 items resulted in eight items being removed from the instrument because the factor loadings were less than .40. Based on a principal components analysis (PCA), the four factors accounted for 65.58% of the variance. Instrument items were assigned to subscales based on a confirmatory factor analysis (Shakespeare-Finch & Obst 2011).

**Validity and reliability of the 2-Way SSS.** Chronbach’s alpha was used to calculate internal consistency; the significance was set at .001 for all factors. Factor 1, *receiving emotional support*, was $\alpha = .92$ in sample 1 and $\alpha = .90$ in sample 2. *Receiving instrumental support* was $\alpha = .86$ for sample 1 and $\alpha = .81$ for sample 2. *Giving emotional support* was $\alpha = .86$ in sample 1 and $\alpha = .84$ in sample 2. Finally *giving*
instrumental support was $\alpha = .84$ and $\alpha = .87$ in samples 1 and 2 respectively. The subscales of each of the factors correlate with the Berlin Social Support Scale (Schulz & Schwarzer, 2003) $r = .91$ and the Social Support Questionnaire (Sarason, Levine, Basham, & Sarason, 1983) $r = .87$ (Shakespear-Finch & Obst, 2011).

The predictive validity of the 2-Way SSS was established using four separate analyses to determine the correlation between it and four measures of wellbeing. The Perceived Stress Scale (PSS; Cohen et al., 1983), the K-10 Measure of Depression (K 10 Scale; Kessler & Mroczek, 1992), the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larson, & Griffin, 1985), and the General Health Questionnaire-12 (GHQ-12; Goldberg et al., 1997). The correlation with the PSS was .23, the K10 was .31, the SWLS was .50, and the GHQ-12 at .22, all correlated at a significance of .001 (Shakespeare-Finch & Obst, 2011).

Overall, the 2-way SSS is a psychometrically sound instrument that displays good reliability and validity. It is one of few instruments that measures giving and receiving social support. The questions in the scale are clear, easy to read, and are not open to interpretation.

**Procedures**

After IRB approval, an email was sent to 6,101 people who had taken courses at Kent State University, and were between the ages of 18 and 30, inviting them to participate in the research (Appendix H). The list of email addresses was obtained from the Department of Institutional Research and was generated randomly using a computer program. It was necessary to obtain at least 6,000 email addresses based on a predicted
response rate of 31% (K. B. Sheehan, 2001) and an estimated rate of incidence of childhood trauma at 50% (Copeland, Keeler, Angold, & Costello, 2007). Typical response rate varies based on the type of study and the population surveyed. For the current study, with an estimated response rate of 31% and an incidence rate of childhood trauma at 50%, a pool of 6,000 potential participants were randomly selected to insure that a minimum of 300 participants was obtained. Further, the number 300 was chosen so that the research study would have statistical power. Initially the response rate was calculated at 10%, and given that an estimated 50% of the population has experienced childhood trauma, it was necessary to obtain 6,000 email addresses.

Exclusionary criteria included any person who was unable to give informed consent and those who did not meet study criteria of having experienced childhood trauma. Persons under the age of 18 or over the age of 30 were excluded because they did not fit the definition of young adult for this study. The email sent to participants contained inclusionary criteria, an invitation to participate, and instructions to access the website. The contents of the website were a demographic questionnaire, the ASPIRES, the CD-RISC, the 2-Way SSS, and the SWLS. Inclusionary criteria included participant history of childhood trauma as per self-report and persons between the ages of 18 and 30.

Each instrument was compiled into Qualtrics (http://www.kent.qualtrics.com), an electronic survey format. Each instrument was entered into the electronic format exactly as it appears in the paper version including copyright information and permissions.

After accessing the website for the research project, each prospective participant was greeted with IRB approval information and a statement of informed consent (see
Appendix I). Participants indicated their consent to participate in the study by continuing the survey. After the informed consent, instructions for completing each instrument were followed by the instrument. Participants completed the questionnaire in the following order: the demographics questionnaire, The ASPIRES, the CD RISC 10, the 2-Way SSS, and the SWLS. The last page of the Internet survey included a page thanking participants for their involvement. Participants were invited to click on a link taking them to a separate survey where they could include an email address for the purposes of inclusion in a drawing for a gift card to a local retailer. Participation in the drawing was optional, but did require submission of contact information for the sole purpose of inclusion in the drawing. The contact information for each participant was never linked to the participant responses. At the completion of data collection, two participants were randomly selected to receive one $25.00 gift card each to a local retailer. The researcher contacted the awardees to inform them they were randomly selected winners of the gift card, and arrangements were made for the awardee to receive the gift card. All participant contact information was destroyed after the gift cards were awarded to the winners of the drawing.

All data collected in Qualtrics were protected through use of an encrypted website and password protection. Completed instruments were then transferred from Qualtrics (http://www.kent.qualtrics.com) to the Statistical Package of the Social Sciences (SPSS) Version 19 for Windows for analysis.
Sampling

Based on recommended acceptable power of .80, an alpha of 0.01, an effect size of 0.15, was used for statistical procedures (Cohen, 1988). A power analysis was conducted using G*Power 3.1.2 (Faul, Erdfelder, & Buchner, 2007) to determine the sample size for the current study. Based on a power analysis, a sample size of at least 109 participants was required based on the variables and a desired alpha level of 0.01. However, to ensure the results are replicable, a larger participant-to-variable ratio was chosen. For the current study, a standard minimum of 300 total participants was used. This is considered acceptable because the number of variables (including demographics) was greater than 10. In the current study, 340 participants completed the survey.

The variables were personal demographics questions, and the primary variables of life satisfaction, spirituality, resilience, and social support. There were 14 total variables, including 7 demographic variables, 1 domain on the factor of resilience as measured by the CD-RISC 10, and 1 component of global transcendence or overall spirituality measured by the ASPIRES. Social Support accounted for 4 variables: given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support. Life satisfaction was a single variable measured by the SWLS.

Data Analysis

Data were analyzed using a multiple regression analysis at an alpha level of 0.01. The beta was set at .80 to reduce the probability of type II error. Regressions were used to analyze the degree of the relationship between variables. In the current study a
hierarchical regression analysis was used. The first regression analysis was used to understand the unique contribution of each of the personal demographic variables (sex, age, ethnicity, involvement in a romantic relationship, level of education, frequency of childhood trauma, severity of childhood trauma, and previous mental health counseling) to overall life satisfaction. A second regression analysis was conducted using all of the demographic variables from analysis 1 and all of the primary variables. The demographic and primary variables were analyzed in the second regression analysis to determine the best predictor of life satisfaction (Dimitrov, 2009).

**Assumptions**

Several assumptions of multiple regression analysis needed to be met. If these assumptions were not met it was necessary to correct the violation of the assumption or analyze the data in another way. Before using a multiple regression analysis it is important to determine that the outcome variable is measured on a continuous scale and the predictor variables on a continuous or categorical scale. If the outcome variable is not measured on a continuous scale then another type of analysis needs to be selected (Osborne & Waters, 2002).

Assumptions included independence of observations, linearity, normality, no significant outliers, and homoscedasticity meaning the variables all have the same degree of variance. Homoscedasticity is detected through use of a scatter plot (Dimitrov, 2009; Osborne & Waters, 2002). It is also assumed that there will not be multicollinearity. Multicollinearity occurs when there are high correlations between the predictor variables. When multicollinearity occurs there is a decreased likelihood a unique proportion of the
variance is explained by each predictor variable (Dimitrov, 2009). The presence of multicollinearity is detected through the tolerance scores on the coefficients output table.

**Multiple Regression Analysis**

In a hierarchical regression analysis each of the independent variables is entered into the regression equation in a specific order. The order is determined based on theoretical knowledge of the independent variables, the $R^2$, and partial coefficients of each independent variable. In this method the hierarchy or order is important because the influence of each of the independent variables on the dependent variable is significantly influenced by the order in which the variables are entered into the regression equation. Some of the disadvantages of using a hierarchical regression analysis are that there is no standard for choosing the order in which to enter the independent variables and by nature it requires that the independent variables are entered into the equation in order, this has a significant influence on the degree to which each independent variable influences the dependent variable (Cohen & Cohen, 1975).

A hierarchical regression analysis was used in the current study. The demographic variables were entered into the regression analysis. These were: sex, age, race and ethnicity, involvement in a romantic relationship, level of education, childhood trauma, frequency of childhood trauma, severity of childhood trauma, previous mental health counseling, and experience of mental health counseling. The predictor variables were entered into the regression analysis. These were: spirituality, resilience, and social support. Hierarchical regression analysis was the best choice for the current study because it allowed control for the demographic variables. Several studies have also
found an association between some of the independent variables and the dependent variable. These include childhood trauma and life satisfaction, life satisfaction and spirituality, life satisfaction and resilience, and, life satisfaction and social support.

**Chapter Summary**

Chapter 2 detailed the methods and procedures used for the current study. It described the methods used for the current study and included the purpose of the study and research question. A description of the instruments used, procedures, participants, and sampling were included. The chapter concluded with a discussion of the data analysis procedures and the delimitations associated with the study. Chapter 3 reports the results of the current study.
CHAPTER III

RESULTS

Chapter 3 includes a detailed summary of the results of the current study. Data analysis, procedures, demographic variables, and descriptive statistics are described in detail. Results of the regression analysis, including correlations, coefficients, and results of the multivariate data analysis are included. The chapter concludes with a summary explaining the results as they relate to the research hypotheses.

The purpose of the current study was to examine spirituality, resilience, and social support in relation to life satisfaction in young adults who experienced childhood trauma. The research question was: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma? The research hypotheses for the study were as follows:

Research Hypothesis: Levels of spirituality, resilience, social support, sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Null Hypothesis 1: Levels of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling do not predict the degree of life satisfaction in young adulthood.

Null Hypothesis 2: Levels of spirituality, resilience, and social support do not predict degree of life satisfaction in young adulthood, after controlling for the variables in Null Hypothesis 1.
Alternate Hypothesis 1: Variables of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Alternate Hypothesis 2: Variables of spirituality, resilience and social support predict the degree of life satisfaction in young adulthood after controlling for the variables of sex, age, ethnicity, relationship status, education, experience of childhood trauma and previous experience in counseling.

Participant Sample

Participants were recruited from Kent State University. Email addresses for young adults who were between the ages of 18 and 30 and who had taken or were currently taking courses at Kent State University were randomly selected from the student database kept by the Department of Institutional Research. The initial list included 6,101 electronically generated email addresses. All participants were recruited via an email invitation composed by the researcher and sent by staff at the Research and Evaluation Bureau at Kent State University. Participation in this online study was voluntary. Reminder emails were sent on a weekly basis over the course of four weeks. Within 30 days of the start of data collection, 300 participants were obtained, the minimum necessary for statistical power. The survey remained opened for 5 additional days and during that time 40 more participants completed the survey.

Of the 6,101 email invitations sent, 463 people opened the link and gave consent to participate in the study. Of these, 95 answered that they had not experienced childhood trauma or did not answer the question and thereby discontinued the survey.
This left 368 participants to continue with the study. An additional 28 participants dropped out of the survey before completion; therefore, 340 total participants completed the research survey. The response rate for the study was 73.4% based on the total number of participants who opened the survey, exceeding the estimated response rate of 31%.

Participants were invited to take part in a drawing for one of two $25.00 gift cards to a local retailer as incentive to participate in the study. After data collection was complete, 2 participants were randomly selected and were notified via email that they had each won a $25.00 gift card. The researcher contacted recipients via email to notify them that they had been randomly selected as a winner of the gift card. Arrangements were made between the winning participants and the researcher for the delivery of the gift card.

**Analytic Procedures**

Data were analyzed using a hierarchical multiple regression analysis at an alpha level of 0.05 rather than 0.01 to allow for further expanded exploration of the variables that contributed to life satisfaction. Multiple regressions were calculated using SPSS. Regressions were used to analyze the degree of the relationship among variables. The factors of spirituality, resilience, social support, and all demographic variables were explored in relation to life satisfaction.

The variables of sex, age, ethnicity, relationship status, severity of childhood trauma, frequency of childhood trauma, and previous experience in mental health counseling are referred to as the demographic variables. The variables of spirituality,
resilience, given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support are referred to as primary variables. Life satisfaction is the outcome variable. Each of the demographic and primary variables was analyzed in terms of their relationship to each other and their relationship to life satisfaction. The demographic variables were entered into the first model of the regression equation. The primary variables were entered into the second model of the regression equation.

Assumptions of Multiple Regression

As explained in Chapter 2, there are several assumptions of multiple regression analysis that need to be met. All assumptions for multiple regression analysis were met including independence of observations, normality of distribution, linearity, homoscedasticity, and multicollinearity.

There is no reason to believe the assumption of independence of observations was not met for the current study. Before using a multiple regression analysis, it is important to determine that the outcome variable is measured on a continuous scale and the predictor variables on a continuous or categorical scale. If the outcome variable is not measured on a continuous scale then another type of analysis needs to be selected. This is not an issue for the current study because the outcome of life satisfaction is measured on a continuous scale.

Linearity indicates that that predictor and outcome variable form a line when graphed on a scatter plot. If the relationship is not linear the degree of the correlation is underestimated. Linearity can be corrected by transforming the data, restricting the
range, or removing the significant outliers. Also included are homoscedasticity meaning the variance of the residuals is the same across the range of scores on the predictor variables; this is detected through use of a scatter plot. The data set for the current study met the assumption of homoscedasticity. If the assumption has been violated, the likelihood of type I error increases (Dimitrov, 2009; Osborne & Waters, 2002).

Based on the results of a scatterplot, the assumptions of linearity and homoscedasticity were not violated for the current study. There is a similar degree of variance between the variables on the outcome measure of life satisfaction.

The assumptions of normality and no significant outliers were met. A one sample Kolmogorov-Smirnov (K-S) test was used to test for normality of the distribution. The distribution included all demographic and all primary variables. The statistic for the one sample K-S test for life satisfaction was .076 indicating the distribution was normal. The residual statistics were used to determine if there were significant outliers. The residual statistics for the current study indicated that there were no significant outliers.

Multicollinearity occurs when there are high correlations between the predictor variables. This becomes a greater issue when a multiple regression analysis is used for explanation rather than prediction and can lead to specification errors. When multicollinearity occurs, there is a decreased likelihood a unique proportion of the variance is explained by each predictor variable. Interpretation of the effects of individual variables is difficult if high correlations exist between predictor variables. Multicollinearity is determined using tolerance and was not an issue in the current study.
The tolerance for all variables was greater than .10 and the variance inflation factor (VIF) was less than 3.00 for all variables.

**Participant Sample and Descriptive Statistics**

The descriptive statistics for the test instruments and the demographic data were analyzed using two regression models. Model one includes the demographic variables whereas model two includes all of the demographic and all of the primary variables. Personal demographics questions were: experience of childhood trauma, sex, age, ethnicity, relationship status, level of education, frequency of childhood trauma, severity of childhood trauma, prior counseling, and experience in counseling. Table 1 depicts all demographic data and a summary of total number of responses, frequency, and percent of the responses.

The final sample comprised 263 females and 77 males for a total of 340 participants. Participants ranged in age from 18 to 30 years. Eighty-nine percent of participants described their race or ethnicity as Caucasian or White, 5.6% were Black or African American, 2.1% multiracial, 1.5% Latino or Hispanic, 1.2% other, and 0.6% Asian or Pacific Islander. Over half of the participants (66.5%) reported that they were currently involved in a supportive romantic relationship.
Table 1

**Demographic Variables For All N**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience of Childhood Trauma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>368</td>
<td></td>
<td>79.50%</td>
</tr>
<tr>
<td>No</td>
<td>90</td>
<td></td>
<td>19.40%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>5</td>
<td></td>
<td>1.10%</td>
</tr>
<tr>
<td>Sex</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>77</td>
<td></td>
<td>22.60%</td>
</tr>
<tr>
<td>Female</td>
<td>263</td>
<td></td>
<td>77.40%</td>
</tr>
<tr>
<td>Age</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>5</td>
<td></td>
<td>1.50%</td>
</tr>
<tr>
<td>21-23</td>
<td>145</td>
<td></td>
<td>42.60%</td>
</tr>
<tr>
<td>24-26</td>
<td>112</td>
<td></td>
<td>32.90%</td>
</tr>
<tr>
<td>27-30</td>
<td>78</td>
<td></td>
<td>22.90%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>2</td>
<td></td>
<td>0.60%</td>
</tr>
<tr>
<td>Black/AA</td>
<td>19</td>
<td></td>
<td>5.60%</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>303</td>
<td></td>
<td>89.10%</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>5</td>
<td></td>
<td>1.50%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>7</td>
<td></td>
<td>2.10%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td></td>
<td>1.20%</td>
</tr>
<tr>
<td>Romantic Relationship</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>226</td>
<td></td>
<td>66.50%</td>
</tr>
<tr>
<td>No</td>
<td>114</td>
<td></td>
<td>33.50%</td>
</tr>
<tr>
<td>Level of Education</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GED or HS Diploma</td>
<td>5</td>
<td></td>
<td>1.50%</td>
</tr>
<tr>
<td>Tech./2 yr. Degree</td>
<td>28</td>
<td></td>
<td>8.20%</td>
</tr>
<tr>
<td>Some College</td>
<td>182</td>
<td></td>
<td>53.50%</td>
</tr>
<tr>
<td>4 yr. Degree</td>
<td>96</td>
<td></td>
<td>28.20%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>26</td>
<td></td>
<td>7.60%</td>
</tr>
<tr>
<td>Doc./Prof. Degree</td>
<td>3</td>
<td></td>
<td>0.90%</td>
</tr>
<tr>
<td>Severity of Childhood Trauma</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>57</td>
<td></td>
<td>16.80%</td>
</tr>
<tr>
<td>Moderate</td>
<td>129</td>
<td></td>
<td>37.90%</td>
</tr>
<tr>
<td>High</td>
<td>118</td>
<td></td>
<td>34.70%</td>
</tr>
<tr>
<td>Extreme</td>
<td>36</td>
<td></td>
<td>10.60%</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 1 (continued)

Demographic Variables For All N

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Childhood Trauma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>91</td>
<td></td>
<td>26.80%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>134</td>
<td></td>
<td>39.40%</td>
</tr>
<tr>
<td>Most of the Time</td>
<td>92</td>
<td></td>
<td>27.10%</td>
</tr>
<tr>
<td>Always</td>
<td>23</td>
<td></td>
<td>6.80%</td>
</tr>
<tr>
<td>Previous Mental Health Counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>159</td>
<td></td>
<td>46.80%</td>
</tr>
<tr>
<td>No</td>
<td>181</td>
<td></td>
<td>53.20%</td>
</tr>
<tr>
<td>Experience of Counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>18</td>
<td></td>
<td>5.30%</td>
</tr>
<tr>
<td>Fair</td>
<td>36</td>
<td></td>
<td>10.60%</td>
</tr>
<tr>
<td>Good</td>
<td>36</td>
<td></td>
<td>10.60%</td>
</tr>
<tr>
<td>Very Good</td>
<td>46</td>
<td></td>
<td>13.50%</td>
</tr>
<tr>
<td>Excellent</td>
<td>23</td>
<td></td>
<td>6.80%</td>
</tr>
</tbody>
</table>

Participants reported the severity of childhood trauma as mild, 16.8%; moderate, 37.9%; high, 34.7%; and extremely severe 10.6%. The frequency of the childhood trauma was reported as happening rarely, 26.8%; sometimes, 39.4%; most of the time, 27.1%; and always, 6.8%. Almost half of the participants (46.8%) reported they had received services from a mental health counseling agency in the past five years. Of those who received services, 5.3% reported it was poor; 10.6% said it was fair; 10.6% reported it was good; 13.5% very good; and 6.8%, excellent.

The primary variables were: spirituality, resilience, and social support (including the four scales of given instrumental support, received instrumental support, given emotional support, and received emotional support). Table 2 includes a summary of the
total number of responses, the mean scores, standard deviations, minimums and maximums of the primary variables.

Table 2

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction</td>
<td>340</td>
<td>5</td>
<td>35</td>
<td>21.82</td>
<td>6.5</td>
</tr>
<tr>
<td>Spirituality</td>
<td>340</td>
<td>13</td>
<td>65</td>
<td>39.74</td>
<td>9.87</td>
</tr>
<tr>
<td>Resilience</td>
<td>340</td>
<td>21</td>
<td>50</td>
<td>38.57</td>
<td>6.17</td>
</tr>
<tr>
<td>Given Instrumental Social Support</td>
<td>340</td>
<td>7</td>
<td>23</td>
<td>17.76</td>
<td>3.31</td>
</tr>
<tr>
<td>Received Instrumental Social Support</td>
<td>340</td>
<td>6</td>
<td>21</td>
<td>16.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Given Emotional Social Support</td>
<td>340</td>
<td>4</td>
<td>23</td>
<td>18.62</td>
<td>3.47</td>
</tr>
<tr>
<td>Received Emotional Social Support</td>
<td>340</td>
<td>7</td>
<td>39</td>
<td>32.1</td>
<td>6.94</td>
</tr>
</tbody>
</table>

The following section provides information on the mean scores and standard deviations of the study population and for each of the primary variables compared with the norming groups on each of the instruments. Life satisfaction was measured by the Satisfaction with Life Scale (SWLS; Diener et al., 1985), which consists of 5 items; each item is rated on a Likert scale with 1 representing a low level of satisfaction and 7 representing a high level of satisfaction. The overall mean score for the norming population on the SLWS was 23.5 with a standard deviation of 6.43 with possible scores on this measure ranged from 5–35 with 5 being low life satisfaction and 35 being high life satisfaction. For the current study, scores ranged from 5 to 35 with a mean of 21.8
and a standard deviation of 6.9. The sample for the current study had a mean score on the Life Satisfaction Scale that was slightly lower than average, indicating the sample population is slightly less satisfied with life than the average person.

The ASPIRES was used to measure spirituality. Possible scores on the instrument range from 9–45. The total overall mean score for the instrument was 31.56 with a SD of 6.91. Scores ranging from 25–36 represent an average level of spirituality. Persons scoring higher than 36 on the ASPIRES have a strong sense of spirituality and have a broader understanding of purpose and their place in the universe. Persons with scores lower than 25 tend to view the world through their own filter and are occupied with personal concerns. For the current study, scores ranged from 9 to 45 with a mean score of 22.39 and a standard deviation of 6.54. The population for the current study had a mean score on the ASPIRES that was slightly lower than average.

The Connor-Davidson Resilience Scale 10 (CD-RISC 10, Connor & Davidson, 2003) was used to measure resilience in the current study. The CD-RISC 10 was normed on a community sample, possible scores on the instrument range from 0–40 with 0 representing low resilience and 40 representing high resilience. The mean score for the instrument is 31.8 with a standard deviation of 5.4. For the current study, scores ranged from 11 to 40 with a mean score of 28.57 and a standard deviation of 6.17. Participants in the current study had a mean score on the CD-RISC 10 that was slightly lower than average.

The 2-Way Social Support Scale (2-Way SSS; Shakespeare-Finch & Obst, 2011) was used to measure given and received instrumental and emotional support for the
current study. Possible scores ranged from 7–42 on received emotional support, 5–30 on given emotional support, 4–24 on received instrumental support, and 4–24 on given instrumental support. For the current study, scores on the factor of received emotional support ranged from 7–39 with a mean score of 32.1 and a standard deviation of 6.94. Scores ranged from 4–23 on the factor of given emotional support, with a mean score of 18.62 and a standard deviation of 3.47. For the current study, scores ranged from 6–21 on received instrumental social support with a mean score of 16.5 and a standard deviation of 3.6. Finally, scores ranged from 7–23 on the factor of given instrumental support with a mean score of 17.76 and a standard deviation of 3.31. Scores on all scales of the social support scale were fairly high, demonstrating that the study population engaged in both given and received instrumental and emotional social support.

Sex correlated highly with several of the variables at .01. T-tests were used to compare males and females on each of the statistically significant variables. The results are depicted in Table 3.

There were significantly more female participants than male participants who participated in the study. An independent samples test was used to compare the means scores of female and male participants. Table 4 depicts the statistically significant variables along with the $t$ values and the degrees of freedom.
Table 3

*Descriptive Statistics for Sex*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction</td>
<td>Male</td>
<td>77</td>
<td>19.89</td>
<td>7.16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>22.39</td>
<td>6.79</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Male</td>
<td>77</td>
<td>24.09</td>
<td>7.54</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>21.90</td>
<td>6.14</td>
</tr>
<tr>
<td>Resilience</td>
<td>Male</td>
<td>77</td>
<td>30.18</td>
<td>6.41</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>28.10</td>
<td>6.03</td>
</tr>
<tr>
<td>Given Instrumental Social Support</td>
<td>Male</td>
<td>77</td>
<td>16.26</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>18.21</td>
<td>2.98</td>
</tr>
<tr>
<td>Given Emotional Social Support</td>
<td>Male</td>
<td>77</td>
<td>21.19</td>
<td>5.18</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>23.08</td>
<td>3.57</td>
</tr>
<tr>
<td>Received Emotional Social Support</td>
<td>Male</td>
<td>77</td>
<td>29.87</td>
<td>8.45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>32.75</td>
<td>6.84</td>
</tr>
</tbody>
</table>

Table 4

*Statistically Significant Variables for Independent-Samples Test by Sex*

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction</td>
<td>-2.716</td>
<td>118.825</td>
<td>.008</td>
</tr>
<tr>
<td>Spirituality</td>
<td>2.337</td>
<td>107.217</td>
<td>.021</td>
</tr>
<tr>
<td>Resilience</td>
<td>2.536</td>
<td>118.133</td>
<td>.013</td>
</tr>
<tr>
<td>Given Instrumental Social Support</td>
<td>-4.669</td>
<td>338</td>
<td>.000</td>
</tr>
<tr>
<td>Given Emotional Social Support</td>
<td>-3.653</td>
<td>338</td>
<td>.000</td>
</tr>
<tr>
<td>Received Emotional Social Support</td>
<td>-2.736</td>
<td>106.797</td>
<td>.007</td>
</tr>
</tbody>
</table>
Women reported higher levels of life satisfaction, given emotional social support, given instrumental social support, and received emotional social support whereas men scored higher on spirituality and resilience scales. Cross tabulation was used to determine if sex was associated with being in a supportive romantic relationship. Thirty-five males and 191 females reported current involvement in a supportive romantic relationship. The Chi square test was significant at .000, $\chi^2 = 19.727$. This indicated that females were more likely to be in a relationship than males. However, there were more female participants than male participants in the current study.

Statistically significant negative correlations were found between spirituality and life satisfaction, $r = -.235$; given instrumental social support, $r = -.265$; received instrumental social support, $r = -.198$; given emotional social support, $r = -.319$; received emotional social support, $r = -.224$; sex, $r = -141$; and severity of childhood trauma, $r = -.112$. Further analyses were run for each of the subscales on the spirituality scale. Table 5 shows the results of the analysis.

Table 5

Descriptive Statistics for the Subscales of the ASPIRES

<table>
<thead>
<tr>
<th>Subscale</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer Fulfillment</td>
<td>340</td>
<td>3.00</td>
<td>15.00</td>
<td>7.80</td>
<td>3.33</td>
</tr>
<tr>
<td>Universality</td>
<td>340</td>
<td>3.00</td>
<td>15.00</td>
<td>7.33</td>
<td>2.50</td>
</tr>
<tr>
<td>Connectedness</td>
<td>340</td>
<td>3.00</td>
<td>15.00</td>
<td>7.27</td>
<td>3.14</td>
</tr>
</tbody>
</table>
Spirituality was negatively associated with all of the other variables in the study. A separate test was run to determine if there were differences on the subscales of the ASPIRES that may have contributed to the negative correlations. A $t$-test was run to compare males and female on each of the subscales of the ASPIRES. Table 6 shows the descriptive statistics.

There was a significant difference between males and females on the prayer fulfillment subscale of the ASPIRES at a significance level of .018. For the current study, males and females scored well below the referenced norms for their age. Typical scores on each of the subscales range from 9 to 11 for males and 9 to 12 for females on the subscales of prayer fulfillment and universality. Typical scores for connectedness range from 10 to 12 for males and 10 to 13 for females. As depicted in Table 6, the mean scores for males and females fell well below the typical score for the age range.

Table 6

*Descriptive Statistics for Each of the Subscales for the ASPIRES*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sex</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer Fulfillment</td>
<td>Male</td>
<td>77</td>
<td>8.58</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>7.57</td>
<td>3.20</td>
</tr>
<tr>
<td>Universality</td>
<td>Male</td>
<td>77</td>
<td>7.79</td>
<td>2.93</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>7.19</td>
<td>2.35</td>
</tr>
<tr>
<td>Connectedness</td>
<td>Male</td>
<td>77</td>
<td>7.71</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>263</td>
<td>7.13</td>
<td>3.01</td>
</tr>
</tbody>
</table>
ANOVA was conducted on responses to the question regarding the experience of counseling. Table 7 depicts the results of the ANOVA. The F is not statistically significant: \( F(4,154) = 1.774, p = .137 \). The results of the ANOVA suggest that there were no significant differences in life satisfaction based on the reported experience of previous counseling.

Table 7

*ANOVA For Experience of Counseling*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>368.218</td>
<td>4</td>
<td>92.054</td>
<td>1.774</td>
<td>0.137</td>
</tr>
<tr>
<td>Within</td>
<td>7990.159</td>
<td>154</td>
<td>51.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8358.377</td>
<td>158</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlational Findings**

Table 8 depicts the correlations found among all primary and all demographic variables. All correlations, significant at .01 and .05, are reported below. A complete list of all correlations can be found in Appendix J.

Several correlations were found to be statistically significant at .01. These were life satisfaction and resilience, life satisfaction and given instrumental social support, life satisfaction and received instrumental social support, life satisfaction and given emotional social support, life satisfaction and received emotional social support, life satisfaction and sex, life satisfaction and involvement in a supportive romantic
Table 8

*Statistically Significant Correlation Coefficients*

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction</td>
<td>Spirituality</td>
<td>-.235**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Resilience</td>
<td>.328**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Given Instrumental SS</td>
<td>.328**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Received Instrumental SS</td>
<td>.490**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Given Emotional SS</td>
<td>.359**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Received Emotional SS</td>
<td>.519**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Sex</td>
<td>.150**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Romantic Relationship</td>
<td>.259**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Education</td>
<td>.152**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Freq. of CT</td>
<td>-.108*</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Given Instrumental SS</td>
<td>-.265**</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Received Instrumental SS</td>
<td>-.198**</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Given Emotional SS</td>
<td>-.319**</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Received Emotional SS</td>
<td>-.224**</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Sex</td>
<td>-.141**</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Severity of CT</td>
<td>-.112*</td>
</tr>
<tr>
<td>Resilience</td>
<td>Given Instrumental SS</td>
<td>.360**</td>
</tr>
<tr>
<td>Resilience</td>
<td>Received Instrumental SS</td>
<td>.191**</td>
</tr>
<tr>
<td>Resilience</td>
<td>Given Emotional SS</td>
<td>.336**</td>
</tr>
<tr>
<td>Resilience</td>
<td>Received Emotional SS</td>
<td>.237**</td>
</tr>
<tr>
<td>Resilience</td>
<td>Sex</td>
<td>-.141**</td>
</tr>
<tr>
<td>Resilience</td>
<td>Age</td>
<td>.135*</td>
</tr>
<tr>
<td>Resilience</td>
<td>Education</td>
<td>.139*</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Received Instrumental SS</td>
<td>.406**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Given Emotional SS</td>
<td>.785**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Received Emotional SS</td>
<td>.465**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Sex</td>
<td>.246**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Age</td>
<td>.148**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Romantic Relationship</td>
<td>.224**</td>
</tr>
<tr>
<td>Given Instrumental SS</td>
<td>Education</td>
<td>.109*</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Given Emotional SS</td>
<td>.396**</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Received Emotional SS</td>
<td>.745**</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Sex</td>
<td>.139*</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Romantic Relationship</td>
<td>.230**</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Education</td>
<td>.175**</td>
</tr>
<tr>
<td>Received Instrumental SS</td>
<td>Freq. of CT</td>
<td>-.115**</td>
</tr>
<tr>
<td>Given Emotional SS</td>
<td>Received Emotional SS</td>
<td>.490**</td>
</tr>
<tr>
<td>Given Emotional SS</td>
<td>Sex</td>
<td>.195**</td>
</tr>
<tr>
<td>Given Emotional SS</td>
<td>Romantic Relationship</td>
<td>.192**</td>
</tr>
<tr>
<td>Received Emotional SS</td>
<td>Sex</td>
<td>.165**</td>
</tr>
<tr>
<td>Received Emotional SS</td>
<td>Age</td>
<td>.108*</td>
</tr>
<tr>
<td>Received Emotional SS</td>
<td>Romantic Relationship</td>
<td>.392**</td>
</tr>
<tr>
<td>Received Emotional SS</td>
<td>Education</td>
<td>.111*</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 8 (continued)

*Statistically Significant Correlation Coefficients*

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Romantic Relationship</td>
<td>.241**</td>
</tr>
<tr>
<td>Age</td>
<td>Romantic Relationship</td>
<td>.116*</td>
</tr>
<tr>
<td>Age</td>
<td>Education</td>
<td>.122*</td>
</tr>
<tr>
<td>Age</td>
<td>Severity of CT</td>
<td>.131**</td>
</tr>
<tr>
<td>Severity of CT</td>
<td>Freq. of CT</td>
<td>.260**</td>
</tr>
<tr>
<td>Freq. of CT</td>
<td>Previous MH Counseling</td>
<td>-.146**</td>
</tr>
</tbody>
</table>

*Note.* Given Instrumental SS= Given Instrumental Social Support, Received Instrumental SS= Received Instrumental Social Support, Given Emotional SS= Given Emotional Social Support, Received Emotional SS= Received Emotional Social Support, Freq. of CT = Frequency of Childhood Trauma, Severity of CT= Severity of Childhood Trauma, Previous MH Counseling= Previous Mental Health Counseling.

*p < .05

**p < .01

relationship, and life satisfaction with level of education. Resilience was also found to be significant at .01 with given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support. Resilience was negatively correlated with sex. Given instrumental social support correlated at .01 with received instrumental social support, given emotional social support, received emotional social support, sex, age, and involvement in a supportive romantic relationship.

Received instrumental social support correlated with given emotional social support, received emotional social support, involvement in a supportive romantic relationship, and level of education. Received instrumental social support was found to be negatively correlated with frequency of childhood trauma. Given emotional social support correlated with received emotional social support, sex, and involvement in a
supportive romantic relationship. Received emotional social support correlated at .01 with supportive romantic relationship and sex.

Other significant correlations included sex with supportive romantic relationship, age and severity of childhood trauma, and severity of childhood trauma with frequency of childhood trauma. Statistically significant negative correlations include frequency of childhood trauma with previous mental health counseling. Spirituality was significantly negatively correlated with life satisfaction, given instrumental social support, received instrumental social support, given emotional social support, received emotional support, and sex at a significance of .01.

**Regression Results**

Table 9 depicts the ANOVA for all of the variables that were entered into the first model of the regression. As can be seen, the F is statistically significant: F(8,331) = 5.766, \( p < .01 \). The F statistic indicates that a combination of the demographic variables accounts for a significant portion of the variance in overall life satisfaction in young adults who experienced childhood trauma.

Table 10 depicts the results of ANOVA for all of the demographic and primary variables. These variables were entered into the second model of the regression. Table 10 shows the F is statistically significant: \( F(14, 325) = 14.605, p < .01 \). The F statistic indicates that at least one of the variables, including all demographic and all primary variables, accounts for a portion of the variance in overall life satisfaction in young adults who have experienced childhood trauma.
Table 9

*ANOVA Table for All Demographic Variables*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1998.212</td>
<td>8</td>
<td>249.776</td>
<td>5.766</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>14339.2</td>
<td>331</td>
<td>43.321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16337.412</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Includes: sex, age, romantic relationship, level of education, experience of childhood trauma, severity of childhood trauma, previous mental health counseling, and experience of counseling.*

Table 10

*ANOVA Table for All Demographic and Primary Variables*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6309.088</td>
<td>14</td>
<td>450.649</td>
<td>14.605</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>10028.324</td>
<td>325</td>
<td>30.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16337.412</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The coefficient of determination ($R^2$) of a regression equation using one sample is considered to be an overestimate of the true variance in a population, when the number of variables increases the $R^2$ becomes artificially inflated. Therefore, the adjusted $R^2$ was used to correct the overestimate. Regression analysis model 1, for the demographic variables had an adjusted $R^2$ of .101 for significant predictors meaning that 10.1% of the variance in life satisfaction can be predicted by the demographic variables. The $R^2$
change was .122. The adjusted $R^2$ for model 2 was .360 and the $R^2$ change was .386. A combination of the primary variables and each of the demographic variables accounts for 36.0% of the variance in life satisfaction. Table 11 depicts the results of model 1.

Table 11

*Coefficients for All Demographic Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard Error</th>
<th>t</th>
<th>Significance</th>
<th>Part Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1.326</td>
<td>.895</td>
<td>1.482</td>
<td>.139</td>
<td>.076</td>
</tr>
<tr>
<td>Age</td>
<td>-.348</td>
<td>.454</td>
<td>-.767</td>
<td>.443</td>
<td>-.040</td>
</tr>
<tr>
<td>Ethnicity</td>
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<td>.482</td>
<td>.289</td>
<td>.773</td>
<td>.015</td>
</tr>
<tr>
<td>Romantic Relationship</td>
<td>-3.643</td>
<td>.791</td>
<td>-4.603</td>
<td>.000**</td>
<td>-.237</td>
</tr>
<tr>
<td>Level of Education</td>
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<td>.436</td>
<td>3.044</td>
<td>.003**</td>
<td>.157</td>
</tr>
<tr>
<td>Severity of Childhood Trauma</td>
<td>-.600</td>
<td>.423</td>
<td>-1.419</td>
<td>.157</td>
<td>-.073</td>
</tr>
<tr>
<td>Frequency of Childhood Trauma</td>
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<td>.423</td>
<td>-1.396</td>
<td>.164</td>
<td>-.072</td>
</tr>
<tr>
<td>Previous Mental Health Counseling</td>
<td>.765</td>
<td>.730</td>
<td>1.048</td>
<td>.295</td>
<td>.054</td>
</tr>
</tbody>
</table>

**$p > .01$**

The demographic variables significant at .001 are supportive romantic relationship ($p = .000$) and level of education ($p = .003$). The squared part correlation for supportive romantic relationship is .0561 indicating that 5.61% of the variance in life satisfaction is uniquely predicted by involvement in a supportive romantic relationship. Level of education has a squared part correlation of .0246, meaning that 2.46% of the
variance in life satisfaction is predicted by level of education. Table 12 depicts all coefficients for model 2.

Table 12

*Coefficients for All Demographic and All Primary Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard Error</th>
<th>t</th>
<th>Significance</th>
<th>Part Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
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<td>.803</td>
<td>1.227</td>
<td>.221</td>
<td>.053</td>
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<tr>
<td>Age</td>
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<td>-1.698</td>
<td>.091</td>
<td>-.074</td>
</tr>
<tr>
<td>Ethnicity</td>
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<td>1.122</td>
<td>.263</td>
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<td>Romantic Relationship</td>
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<td>.725</td>
<td>2.329</td>
<td>.020*</td>
<td>.101</td>
</tr>
<tr>
<td>Level of Education</td>
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<td>.378</td>
<td>1.567</td>
<td>.118</td>
<td>.068</td>
</tr>
<tr>
<td>Severity of Childhood Trauma</td>
<td>-.603</td>
<td>.364</td>
<td>-1.656</td>
<td>.099</td>
<td>-.072</td>
</tr>
<tr>
<td>Frequency of Childhood Trauma</td>
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<td>.361</td>
<td>-1.369</td>
<td>.172</td>
<td>-.059</td>
</tr>
<tr>
<td>Previous Mental Health Counseling</td>
<td>-.093</td>
<td>.631</td>
<td>-.148</td>
<td>.883</td>
<td>-.006</td>
</tr>
<tr>
<td>Spirituality</td>
<td>-.118</td>
<td>.050</td>
<td>-2.376</td>
<td>.018*</td>
<td>-.103</td>
</tr>
<tr>
<td>Resilience</td>
<td>.249</td>
<td>.057</td>
<td>4.379</td>
<td>.000**</td>
<td>.190</td>
</tr>
<tr>
<td>Given Instrumental Social Support</td>
<td>-.143</td>
<td>.156</td>
<td>-.919</td>
<td>.359</td>
<td>-.040</td>
</tr>
<tr>
<td>Received Instrumental Social support</td>
<td>.404</td>
<td>.130</td>
<td>3.120</td>
<td>.002**</td>
<td>.136</td>
</tr>
<tr>
<td>Given Emotional Social Support</td>
<td>.174</td>
<td>.127</td>
<td>1.369</td>
<td>.172</td>
<td>.059</td>
</tr>
<tr>
<td>Received Emotional Social Support</td>
<td>.192</td>
<td>.070</td>
<td>2.738</td>
<td>.007**</td>
<td>.119</td>
</tr>
</tbody>
</table>

**p > .01
*p > .05
The coefficients for model 2 are reported in Table 12. Model 2 includes all demographic and all primary variables. At a significance of .01: Resilience (.000), received instrumental social support (.002), and received emotional social support (.007), were all significant predictors of life satisfaction in young adults who experienced childhood trauma. The squared part correlation was .0361 for resilience, meaning that 3.61% of the variance in life satisfaction was explained by resilience. Received instrumental social support had a squared part correlation of .0184, meaning that 1.84% of the variance in life satisfaction was explained by received instrumental social support. Received emotional social support had a squared part correlation of .0141, meaning that 1.41% of the variance in life satisfaction was explained by received emotional social support.

Spirituality \( (p = .018) \) had a negative correlation with life satisfaction and involvement in a supportive romantic relationship \( (p = .020) \) positively predicted life satisfaction in young adults who experienced childhood trauma at a significance of .005. The squared part correlation for spirituality was .0106 meaning that spirituality accounts for 1.06% of the variance in life satisfaction. Involvement in a supportive romantic relationship had a squared part correlation of .0102 meaning that being in a supportive romantic relationship accounted for 1.02% of the variance in life satisfaction.

**Chapter Summary**

This chapter presented the results of the research question: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma? Additionally, the descriptive statistics of the variables
and the results of the multiple regression analysis were presented in this chapter. Chapter 4 includes a detailed discussion of the findings, including the relationships between the variables and the implications of the findings.
CHAPTER IV
DISCUSSION

This chapter provides an in-depth discussion of the findings from this study. The relationships among each of the primary variables of life satisfaction, spirituality, resilience, and social support are discussed. Following the discussion of each of the primary variables is the discussion of the relationship between the descriptive data and the primary variables. The chapter concludes with recommendations for future research and a summary of the chapter.

Research Question and Research Hypotheses

The research question for the current study was: To what extent do spirituality, resilience, and social support predict life satisfaction in young adults who experienced childhood trauma? The research hypotheses for the current study were:

Research Hypothesis: Levels of spirituality, resilience, social support, sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Null Hypothesis 1: Levels of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling do not predict the degree of life satisfaction in young adulthood.

Null Hypothesis 2: Levels of spirituality, resilience, and social support do not predict degree of life satisfaction in young adulthood, after controlling for the variables in Null Hypothesis 1.
Alternate Hypothesis 1: Variables of sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood.

Alternate Hypothesis 2: Variables of spirituality, resilience and social support predict the degree of life satisfaction in young adulthood after controlling for the variables of sex, age, ethnicity, relationship status, education, experience of childhood trauma and previous experience in counseling.

The purpose of the current study was to analyze possible factors that serve a protective function in those with a history of childhood trauma. Several authors link childhood trauma to problems long after the event ended, including anxiety, depression, and physical health problems in adulthood (Chartier et al., 2007; Macmillan et al., 2001; Sorbo et al., 2013). Those with a history of childhood trauma are at an increased risk of long-term negative experiences. However, the focus of the current study was on persons who experienced a positive outcome, in the form of increased life satisfaction, despite negative life situations. Existing literature indicates that specific factors buffer the negative effects of childhood trauma. These include spirituality (Neimeyer et al., 2011; Piedmont, 2004; P. L. Ryan, 1998), resilience (Cicchetti et al., 1993; Jiménez-Ambriz et al., 2012; Lansford et al., 2006), and social support (Lim & Yi, 2009; Park & Roh, 2013; Park et al., 2012). The intent of the current study was to determine the extent to which of these factors predict life satisfaction so that targeted preventative services could be recommended based on the results.
The current study contributes to the body of knowledge on factors that serve a protective function in those with a history of childhood trauma. The current study suggests that some factors are better at shielding young adults from the negative effects of childhood trauma. The results of the regression indicate that resilience, received instrumental social support, received emotional social support, and involvement in a supportive romantic relationship have the strongest contribution to life satisfaction in young adults with a history of childhood trauma.

The significant relationships between life satisfaction and the variables included: life satisfaction and received emotional social support \( (r = .519) \), life satisfaction and received instrumental social support \( (r = .490) \), life satisfaction and given emotional social support \( (r = .359) \), life satisfaction and given instrumental social support \( (r = .328) \), life satisfaction and resilience \( (r = .328) \), life satisfaction and involvement in a supportive romantic relationship \( (r = .259) \), life satisfaction and level of education \( (r = .152) \), and life satisfaction and sex \( (r = .150) \). The results indicate that of the variables analyzed, social support has the strongest correlation with life satisfaction in young adults with a history of childhood trauma. After social support, resilience had the second highest correlation with life satisfaction, followed by involvement in a supportive romantic relationship, level of education, and sex.

The findings of the current study support the research hypothesis that levels of spirituality, resilience, social support, sex, age, ethnicity, relationship status, education, severity of childhood trauma, frequency of childhood trauma, and previous experience in counseling predict the degree of life satisfaction in young adulthood. Although literature
exists to suggest that spirituality (Bartlett et al., 2003; Neimeyer et al., 2011; Perrone et al., 2006), ethnicity (Paranjape & Kaslow, 2010; Park & Roh, 2013; Park et al., 2012), and previous mental health counseling (Arrindell et al., 2001; Pavot & Diener, 2008) positively influence life satisfaction, the results of the current study did not suggest this.

Based on the results of both the regression and the correlations, the current study found that spirituality was negatively associated with life satisfaction, whereas ethnicity, frequency of childhood trauma, severity of childhood trauma, and previous mental health counseling had no significant correlation with life satisfaction.

The hierarchical regression that was conducted for the current study allowed for the variables to be added to the regression equation in two models. The first model included all demographic variables and the second model included all demographic and all primary variables. The first regression model with the demographic variables indicated that level of education and involvement in a supportive romantic relationship were significant predictors of life satisfaction in young adults who experienced childhood trauma. In the second model, level of education was no longer a significant predictor of life satisfaction. The first model showed a positive relationship between life satisfaction and level of education. Although level of education predicts life satisfaction in the first model, it is no longer a significant predictor when other predictors are added to the equation. This is because new variables that were more significant contributors to life satisfaction were added to the regression equation.

The first model showed that involvement in a romantic relationship and level of education contributed to overall life satisfaction in young adults who have experienced
childhood trauma. The second model that combined all demographic and primary variables demonstrated that involvement in a romantic relationship, resilience, and social support were significant predictors in life satisfaction. Level of education was no longer a significant predictor of life satisfaction in the second model.

Unique to this study was the simultaneous exploration of each of the predictor variables in relation to overall life satisfaction. Previous studies have only explored one or two of these variables in relation to overall life satisfaction. In previous studies all three primary variables were associated with higher levels of life satisfaction and other positive outcomes. The current study found that when all predictor and demographic variables were explored in combination, received social support and resilience were overwhelmingly the strongest predictors of life satisfaction. To a lesser extent, involvement in a supportive romantic relationship was also a significant predictor of life satisfaction in young adults who experienced childhood trauma.

The regression analysis demonstrated that a few of the variables were significant predictors of life satisfaction. At a significance level of .05 involvement in a supportive romantic relationship positively predicted life satisfaction ($p = .020$). Resilience ($p = .000$), received instrumental social support ($p = .002$), and received emotional social support ($p = .007$), were all significant at .01. The results of the regression analysis indicate that as involvement in a supportive romantic relationship, resilience, received instrumental social support, and received emotional social support increase, so do levels of life satisfaction.
Spirituality ($p = .018$), negatively predicted life satisfaction at a significance of .05. The negative relationship between spirituality and life satisfaction indicates that as a person’s level of spirituality increased, their level of life satisfaction decreases. Resilience, received social support, and involvement in a supportive romantic relationship are the strongest predictors of life satisfaction in young adults who have experienced childhood trauma. Additionally, it was found that spirituality negatively predicted life satisfaction.

There were several zero order correlations between life satisfaction and the predictor variables. The results of the current study show that resilience, all four types of social support (given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support), sex, age, involvement in a supportive romantic relationship, and level of education all positively correlate with life satisfaction in young adults with a history of childhood trauma.

The findings of the current study are consistent with the existing research. The current study found a positive correlation between resilience, social support, and life satisfaction. Multiple studies found that social support was positively associated with life satisfaction (Seitz et al., 2011; Werner & Johnson, 2004). Resilience was correlated with positive life satisfaction in the current study, as in previous research (Barnes & Lightsey, 2005; Huber et al., 2010; R. M. Ryan et al., 2005). The current study provides evidence that social support is positively correlated with life satisfaction (Dimitrova et al., 2010; Fredrick & Goddard, 2007; Keller et al., 2010). Further, in the current study there were gender differences on overall life satisfaction. In the current study, men had mean scores
on the SWLS that were slightly lower than women. Men had a mean score of 19.90 on the SWLS whereas women had a mean score of 22.38. In the current study, both men and women scored lower than the mean scores on the SWLS. The mean score for the SWLS is 23.5. This is similar to the findings of Park and Roh (2013) and Pérez-Garcia et al. (2011) who found gender differences between men and women on measures of life satisfaction. There is evidence in the literature to suggest that there is a positive association between level of education and positive outcomes. P. D. Parker, Thoemmes, Duineveld, and Salmela-Aro (2015); Lindfors, Hultell, Rudman, and Gustavsson (2014); and Cutler, Huang, and Lleras-Muney (2015) all found that higher levels of education were associated with an increase in feelings of wellbeing. Some possible reasons for the correlation found in the current study may be that those with higher levels of education are better able to provide for themselves, are more likely to work doing something they enjoy, or have more opportunities for professional growth and development.

**Discussion and Implications of Findings**

The current study found that life satisfaction had a positive correlation with many of the variables. These include resilience, social support (given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support), and many of the demographic variables. There was also a significant negative correlation between life satisfaction and spirituality. The regression indicated that resilience, received instrumental social support, received emotional social support, and involvement in a supportive romantic relationship,
positively predicted life satisfaction. Spirituality was found to have a negative relationship with life satisfaction.

**Resilience**

Resilience had a strong positive correlation with all types of social support, sex, and life satisfaction. These outcomes were consistent with previous research. Resilience has been studied in relation to social support. Increased levels of resilience were associated with increased levels of social support in American veterans returning from Iraq and Afghanistan (Tsai et al., 2012). Adolescents who were exposed to high levels of violence and had high levels of resilience also reported high levels of social support (Salami, 2010). Resilience was positively associated with increased social support in parents of children with disabilities (Migerode et al., 2012). Persons who have better social support systems may be better able to exhibit resilient behaviors because of a belief that there is a person or group of people who will support and accept them despite strife. Resilience and life satisfaction were positively correlated in the current study and in the literature (Barnes & Lightsey, 2005; Huber et al., 2010; R. M. Ryan et al., 2005).

Interestingly, the current study found a lack of relationship between resilience and spirituality. Literature on this subject is inconsistent. Some literature indicates a strong negative relationship between resilience and spirituality, and other literature indicates a strong positive relationship between resilience and spirituality. Several studies have addressed the connection between resilience and spirituality. Connor et al. (2003) found those with increased levels of spirituality also had poor mental health. This study is similar to the findings of the current study. Others found positive correlations between
spirituality and resilience (Kim & Esquivel, 2011; Raftopoulos & Bates, 2011; P. L. Ryan, 1998). Spirituality was also negatively related to social support. It is possible that persons who lack social support turn to spirituality as a way to fulfill the need for social support.

Resilience predicted life satisfaction in the regression analysis and was correlated with life satisfaction. There is enough evidence in the literature (Herrman et al., 2011) to suggest that resilience is a multifaceted construct consisting of personal factors, biological factors, and environmental factors, and the combined effects of all three factors. It is possible to improve upon the personal and environmental components of resilience. Therefore, counselors can work with youth and young adults by helping them to identify and utilize personal strengths and connect them to resources within their environment. By engaging in these activities with clients, counselors can help to increase the controllable personal, environmental, and combined factors of resilience. Increasing the controllable factors of resilience may lead to an increase in life satisfaction. Also, it is debatable as to whether or not these are actually controllable factors of resilience or just forms of social support. Seides (2010) found that adversity decreases resilience particularly in those who have experienced childhood trauma. This exposure to adversity can be likened to a flu inoculation, in a typical person a dormant amount of the virus protects against the flu; however in those with compromised immune systems, or with an allergy to any of the ingredients, it does more harm than good.
**Spirituality**

In the current study a negative relationship was found between spirituality and the following: life satisfaction, given instrumental social support, received instrumental social support, given emotional social support, received emotional social support, and sex (all at $p \leq .01$). These results indicate that the more spiritual a person is, the less satisfied he or she is with life and is less likely to give and receive any type of social support. Contrary to anticipated results, based on the research question and research hypothesis, the current study did not provide evidence of a significant relationship between spirituality and resilience. Literature on the relationship between spirituality and social support is inconsistent. Some research indicates a positive relationship while other research indicates negative relationship. P. L. Ryan (1998) found that those who experienced childhood trauma were likely to change religions or describe themselves as not religious; however they did report that they were spiritual. Galea (2008) found that spiritual practices are helpful in healing from trauma.

Some reasons for this discrepancy between the literature on spirituality and life satisfaction and the results of the current study may be that the participants of the current study did not fully understand the nature of the questions or possibly assumed that the questions pertained to religiosity, not spirituality. These are two distinct constructs. Questions on the ASPIRES ask about spiritual practices such as spending time in prayer and meditation. This and other related questions may have confused some of the participants who may not have understood prayer and meditation as spiritual practices. The literature supports the distinction between spirituality and religiosity. Spirituality is
a motivating trait that remains stable over time. It inspires people to seek positive interactions for the benefit of others (Piedmont, 2001). Religiosity is an involvement in organized religion and the conviction of religious beliefs (Maltby & Day, 2004).

Studies of spirituality and religiosity have found that persons define spirituality and religiosity as separate constructs. Participants in P. L. Ryan’s (1998) study were clear that they were spiritual but not religious. Galea (2008) pointed out the differences between being religious and being spiritual. He found that child abuse negatively impacts the degree to which a person is spiritual or religious. Participants in his study reported that they were neither spiritual nor religious.

Literature also suggests that those who have a history of childhood trauma often view religion negatively. The results of P. L. Ryan’s (1998) study suggest that those who experienced childhood trauma were more likely to change religions from the religion of their upbringing or avoid organized religion altogether. However, despite a negative view of religion, many persons in P. L. Ryan’s (1998) study did describe themselves as spiritual.

Additionally, the literature (Galea, 2008; P. L. Ryan, 1998) indicates that individuals who are in crisis use prayer as a means to find hope and to cope with difficult life events. If a person feels as though his or her prayers are not answered or abandoned by their higher power, it is possible that he or she will cope with the loss by avoiding spiritual practices. Several studies have found that those who experience childhood trauma avoid people or situations that they believe will cause trauma (Cicchetti & Rogosch 2007; Cicchetti et al., 1993; Galea, 2008; Werner & Johnson, 2004). These
researchers suggest that those who have experienced childhood trauma may be more likely to disengage from situations that they perceive to be emotionally unhealthy. It is possible that young adults who have experienced childhood trauma perceive their relationship with a higher power to be unhealthy because they were not protected from the trauma and therefore in the present situations they view a relationship with a higher power as a harmful relationship to be avoided.

In the current study, there was a negative correlation between spirituality and all four types of social support, resilience, and all of the demographic variables. However, previous research suggests that although spirituality often changes after childhood trauma, there is a benefit from engaging in spiritual practices. It is possible that it is not spirituality that increases life satisfaction of those who have experienced childhood trauma; rather, it is the involvement in a supportive spiritual community that increases life satisfaction. Involvement in a spiritual community can provide a person with social support. The current study found that social support has a strong positive relationship with life satisfaction. It is suggested that the relationship between social support and a supportive spiritual community needs to be studied further.

Another reason for the negative relationship between spirituality and childhood trauma may be that participants were young adults. It is common for adolescents and young adults to explore and their own spiritual beliefs and to question the beliefs that they were raised with. Additionally, being spiritual or religious may be viewed negatively among participants in this age group. It is possible that the negative correlation between these two constructs is related to participant age. There is conflicting
literature on this. Rounding, Hart, Hibbard, and Carroll (2011) found that spirituality acts as a buffer to depression in college age participants who have experienced childhood trauma whereas O’Connor, Hoge, and Alexander (2002) have found that young adulthood is a time when people explore other religions or avoid religion altogether. There is a need for further research to explore if this finding is unique to persons who have experienced childhood trauma. A study comparing persons with a history of childhood trauma to those who have not experienced childhood trauma could help determine if one group views spirituality more positively than another. Given the wealth of research to indicate a strong positive relationship between spirituality and life satisfaction, it is recommended that these two constructs be further studied in relation to each other before clinical recommendations can be made.

**Social Support**

All types of social support inter-correlated highly with each other and all correlated at $p = .01$ between given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support. Each correlated highly with life satisfaction, resilience, and involvement in a supportive romantic relationship. Results of the regression demonstrate that received instrumental social support and received emotional social support are strong predictors of life satisfaction. These findings are consistent with the literature. Young adults tend to benefit more from social support. Li et al. (2011) discovered younger persons between the ages of 17 and 22 who had socially supportive relationships also had higher levels of life satisfaction; whereas older adults benefitted most in terms of increased life
satisfaction when they received more than they gave. Socially supportive relationships
have a benefit to overall life satisfaction in young adults. It may be valuable for those
who work with youth who have experienced childhood trauma to encourage activities
where a young person has the opportunity to give back to others. Activities could include
volunteering, involvement in sports, and involvement in religious community.

The current study provides evidence for fostering socially supportive relationships
outside of the counseling relationship when working with clients who have experienced
childhood trauma. School counselors and those who work with clients in a structured
setting may be better able to help clients to foster healthy and supportive relationships
with peers because of the unique way in which they work with youth in a self-contained
social environment. Results of the correlation suggest that young adults also benefit from
given social support. Given social support was not significant in the regression equation,
but did correlate with life satisfaction. Future research may include studies to determine
if given social support correlates with a different positive outcome variable such as
self-esteem. It is helpful when working with young adult clients to encourage community
service or suggest other ways for the client to give social support to others.

Evidence in the current literature suggests that social support and involvement in
a supportive romantic relationship have similar benefits. Adamczyk and Segrin (2015)
and Graham and Barnow (2013) compared persons involved in a supportive romantic
relationship and who were not involved in a supportive romantic relationship on a
measure of wellbeing. It was found that both groups had similar levels of wellbeing. The
authors postulated that it was not important to be in a supportive romantic relationship so
much as it was important to have social support. Both constructs were closely correlated in the current study. Involvement in a supportive romantic relationship and social support both highly predicted life satisfaction. An explanation of this relationship may be that a supportive romantic relationship is a form of social support and having a partner provides a person with both emotional and instrumental social support. Counselors could use this knowledge to inform counseling practice by engaging in dialogue with clients about the quality of their current romantic relationship and can encourage clients to nurture his or her romantic relationship. Future research may focus on identifying persons who are sources of social support for children and adolescents who experienced childhood trauma. It may be helpful to identify the types of relationships are most socially supportive to young adults who have experienced childhood trauma. Future research could focus on identifying what age ranges gain the most benefit from received social support so that services can be targeted to the ages that would receive the most benefit.

Received instrumental social support correlated negatively with frequency of childhood trauma in the current study. This means that as the frequency of the trauma increases, the level of received instrumental social support decreases. The negative relationship between received instrumental social support and frequency of childhood trauma is not supported by the literature. There is evidence that social support buffers the effects of childhood trauma (Evans, Steel, & DiLillo, 2013) and that forms of child abuse involve a caregiver withholding material items such as food, medical care, and affection from a child (Bremner et al., 2000; Bremner et al., 2007). Whereas no literature was
found to suggest that the frequency of childhood trauma is related specifically to received social support, there is literature to suggest that the experience of abuse in childhood leads to difficulty with emotional processing and social competence in adulthood (Repetti, Taylor, & Seeman, 2002). Although social competence and social support are not the same constructs they may be related to the quantity and quality of social relationships. Counselors can use this information when working with children and adolescents who have experienced frequent childhood trauma. Counselors can work to help children and adolescents get social support by encouraging healthy peer relationships, encouraging involvement in sports and group activities, and giving resources that will help children obtain material items that they need.

Received instrumental social support also correlated with level of education, but given emotional social support and given instrumental social support did not significantly correlate at .01, meaning that as instrumental social support increases so does level of education. Some reasons for this correlation may be that persons, who have more access to material items that support education such as access to information, transportation, technology, and financial support, are better able to work towards educational goals. Counselors who work with adolescents who have experienced childhood trauma can engage in dialogue about educational opportunities and funding opportunities available to help them achieve educational goals.

**Childhood Trauma**

Other correlations included the correlation between age and severity of childhood trauma. Older participants reported more severe childhood trauma. The relationship
between age and severity of childhood trauma is not explained in the literature. This correlation may be due to an increased awareness of the severity of childhood trauma experienced as a person achieves more life experience. This could be due to participants exploring their past childhood hurts as they meet new people, settle into a romantic relationship, or have children of their own. Another possible explanation for this correlation may be the changing attitudes of society towards the types of punishments that are considered appropriate for children.

It was found that severity and frequency of childhood trauma were positively correlated. Persons who experienced more severe childhood trauma also experienced a higher frequency of childhood trauma. This is consistent with previous research. Iwaniec et al. (2006), Ullman and Filipas (2001), and Werner (1992) all found that limited exposure to trauma was associated with positive outcomes. Maercker, Michael, Fehm, Becker, and Margraf (2004) and McCutcheon et al. (2010) found that age of first trauma was associated with a greater risk of negative consequences later in adulthood. Future research could further analyze the relationship between age of first trauma and later adult life satisfaction. This information could be used to target preventative services and early intervention to prevent lasting negative effects of childhood trauma.

Those who experienced frequent childhood trauma were also significantly less likely to have reported receiving mental health counseling services. This is consistent with the literature. Fredrick and Goddard (2007), Galea (2008), and Werner and Johnson (2004) found adults who experienced childhood trauma have a tendency to avoid
situations that are difficult. Avoidance of mental health counseling may be a form of withdrawal from a situation that causes psychological discomfort.

The negative correlation between frequency of childhood trauma and life satisfaction was expected. Targeted services for those who have experienced childhood trauma and those who are at risk for childhood trauma may help to reduce the frequency of childhood trauma and lead to higher levels of life satisfaction in this population.

**Limitations**

There are limitations of the current study to be noted. The current study used a correlational research design to analyze the relationship among the variables. A large number of predictor variables or predictor variables not distinctly separate could influence the results of the study. In the current study the predictor variables of given instrumental social support, received instrumental social support, given emotional social support, and received emotional social support were all closely related. Furthermore, there was a high correlation between each type of social support and involvement in a supportive romantic relationship. It is possible the high correlation between these variables is because the constructs are similar.

Sampling was also a limitation of the current study. The sample was comprised largely of females \((n = 263)\) and persons who identified as White \((n = 303)\). With a largely White, female population, it is difficult to determine if the results of the current study are valid for more diverse groups.

The study population consisted of young adults who were currently attending or had attended college in the past. The study also relied on participant retrospective reports
of childhood trauma. The sample could have influenced the findings in that persons who have the initiative to pursue post-secondary education typically have some sort of social support and may be more resilient. The retrospective nature of the questions may have altered the participant’s perceptions of event because over time persons may recall events differently. Suggestions for overcoming these limitations are addressed in the next section.

**Recommendations for Future Research**

Several findings in the current study aligned with previous research. It is recommended that these findings be further studied. Life satisfaction was positively correlated with level of education, positing that as a person’s level of education increases, their level of life satisfaction also increases. Level of education also correlated with received instrumental social support. Again, this finding did not align with the literature. It would be beneficial to know exactly what types of received instrumental social support are most valuable to young adults with a history of childhood trauma.

In the current study spirituality had significant ($p = .01$) negative correlations with several other variables including: life satisfaction, given instrumental social support, received instrumental social support, given emotional social support, received emotional social support, and sex. According to the findings, people who are more spiritual are less satisfied with life, and are less likely to give or receive social support. Previous research on spirituality and each of the aforementioned variables is mixed; some indicates that there is a positive relationship between the variables while other research indicated that there is a negative relationship. Additionally, there was a lack of relationship between
resilience and spirituality. As there is conflicting literature (O’Connor et al., 2002; Rounding et al., 2011) on the role of spirituality in young adults, in particular young adults who have experienced childhood trauma, it is recommended that spirituality be studied in a population of adults of all ages who have experienced childhood trauma to determine if there are differences between age groups and the experience of spirituality as a protective factor.

Those who reported a high frequency of childhood trauma also reported lower levels of social support and were less likely to have received mental health counseling services. This correlation differed from previous research and warrants future study to determine if the results are replicable or transferable to middle age and older adults as well. Finally, severity of childhood trauma and age were positively correlated, suggesting that the older a participant was, the more likely they were to report more severe childhood trauma.

Previous research (Cicchetti & Rogosch 2007; Cicchetti et al., 1993; Galea, 2008; Werner & Johnson, 2004) suggests that persons who have experienced childhood trauma avoid relationships they perceive to be unhealthy. Future research may explore the relationship between the disengagement from unhealthy relationships and the influence this has on the ability to form and maintain socially supportive relationships later in life.

It is strongly recommended that researchers further explore the ways in which protective factors can be encouraged in youth, particularly those who have experienced childhood trauma. There is little in the research to differentiate between trait resilience and coping skills. It is recommended that researchers further investigate the relationship
between trait resilience and active coping skills to better distinguish between the two constructs and to further investigate the influence each may have on overall life satisfaction in young adults with a history of childhood trauma.

Future research may address the limitations of the current study. Future research can include a similar study that utilizes a longitudinal design or using a stratified sample to address the issues related to the study population. A sample population that included all age groups and persons from all educational backgrounds would contribute to the findings of the current study.

Chapter Summary

As previously stated in Chapter 1, there is overwhelming evidence that the experience of childhood trauma has negative repercussions in adulthood when compared to adults with no history of trauma (Jeon et al., 2009; Macmillan et al., 2001; Norman et al., 2012). There is also evidence to suggest resilience (Cicchetti et al., 1993; Jiménez-Ambriz et al., 2012; Lansford et al., 2006) and social support (Lim et al., 2009; Park & Roh, 2013; Park et al., 2012), increase the potential for positive outcomes in the form of life satisfaction in persons who have experienced childhood trauma (Arrindell et al., 2001; Diener et al., 1999; Seitz et al., 2011).

Much of the previous research on childhood trauma focused on the negative outcomes associated with childhood trauma. The current study adds to the research on positive outcomes despite the experience of childhood trauma. As a result of this study we have evidence to suggest that several variables contribute to life satisfaction in young adults with a history of childhood trauma. Some of these variables have a stronger
protective quality than others. The results of the current study indicate resilience, received instrumental social support, received emotional social support serve the strongest protective function in those with a history of childhood trauma. Involvement in a supportive romantic relationship also has a protective quality, but to a lesser degree than resilience and received social support. Overall the findings of the current study add to the research on positive outcomes despite the experience of childhood trauma.

The current study demonstrated that there are several protective factors that contribute to the positive outcome of life satisfaction in young adults with a history of childhood trauma. The results of this study suggest that it is possible to have a satisfying life despite childhood trauma.
APPENDICES
APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
Appendix A

Institutional Review Board Approval

Sent: Wednesday, September 24, 2014 1:45pm
To: Rainey, John
Cc: Vitale, Rachel, Osborn, Cynthia
Subject: RE: IRB # 14-430 entitled “Spirituality, Resilience, and Social Support as predictors…”

Hello,
I am pleased to inform you that the Kent State University Institutional Review Board reviewed and approved your Application for Approval to Use Human Research Participants as a Level II/Expedited, category 7 project. Approval is effective for a twelve-month period:


*A copy of the IRB approved consent form is attached to this email. This “stamped” copy is the consent form that you must use for your research participants. It is important for you to also keep an unstamped text copy (i.e., Microsoft Word version) of your consent form for subsequent submissions.

Federal regulations and Kent State University IRB policy require that research be reviewed at intervals appropriate to the degree of risk, but not less than once per year. The IRB has determined that this protocol requires an annual review and progress report. The IRB tries to send you annual review reminder notice to by email as a courtesy. However, please note that it is the responsibility of the principal investigator to be aware of the study expiration date and submit the required materials. Please submit review materials (annual review form and copy of current consent form) one month prior to the expiration date.

HHS regulations and Kent State University Institutional Review Board guidelines require that any changes in research methodology, protocol design, or principal investigator have the prior approval of the IRB before implementation and continuation of the protocol. The IRB must also be informed of any adverse events associated with the study. The IRB further requests a final report at the conclusion of the study.

Kent State University has a Federal Wide Assurance on file with the Office for Human Research Protections (OHRP); FWA Number 00001853.

If you have any questions or concerns, please contact the Office of Research Compliance at Researchcompliance@kent.edu or 330-672-2704 or 330-672-8058.

Kent State University Office of Research Compliance
224 Cartwright Hall | fax 330.672.2658

Tricia Sloan | Administrator | 330.672.2181 | psloan1@kent.edu
Kevin McCready | Assistant Director | 330.672.8058 | kmccrea1@kent.edu
Paulette Washko | Director | 330.672.2704 | pwashko@kent.edu
APPENDIX B

DEMOGRAPHICS
Appendix B

Demographics

Instructions: Please read each statement below and select the response that best fits you.

1. **Sex:**
   - Male
   - Female
   - Other

2. **Age:**
   - 18-20
   - 21-23
   - 24-26
   - 27-30

3. **Ethnicity:**
   - Asian/Pacific Islander
   - Black/African American
   - Native American/Alaska Native
   - Caucasian/White
   - Latino/Hispanic
   - Multiracial
   - Other

4. **Are you in a supportive romantic relationship?**
   - Yes
   - No

5. **Highest level of education achieved:**
   - Less than high school diploma
   - High school diploma or GED
   - Technical school/Associates degree
   - Some college
   - 4 year college degree
   - Master’s degree
   - Doctoral or professional degree

6. **Before the age of 18 did you experience any form of trauma?**
   Examples include serious personal illness, serious illness (mental or physical) or death of an immediate family member, involvement in a life threatening accident or natural disaster, or parental substance abuse. Trauma also includes: physical abuse, emotional abuse, or sexual abuse and behaviors involved with them including, but not limited to, being punched, kicked, ridiculed, threatened, ignores, intimately touched against your will, or forced to have sex against your will.
   - Yes
   - No

   A. **Please select the word or statement that describes the severity of the trauma you experienced as a child.**
   - Mild Severity
   - Moderate Severity
   - High Severity
   - Extremely Severe

   B. **Please select the word or statement that describes the frequency of the trauma you experienced as a child.**
Rarely   Sometimes   Most of the time   Always

7. **In the past 5 years have you received services from a mental health agency?**
   Yes   No

   A. **Please select a word that describes your experiences of counseling.**
   Poor   Fair   Good   Very Good   Excellent
APPENDIX C

THE SATISFACTION WITH LIFE SCALE
Appendix C

The Satisfaction With Life Scale

Below are five statements that you may agree or disagree with. Using the 1–7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 – Strongly agree
- 6 – Agree
- 5 – Slightly agree
- 4 – Neither agree nor disagree
- 3 – Slightly disagree
- 2 – Disagree
- 1 – Strongly disagree

___ In most ways my life is close to my ideal.

___ The conditions of my life are excellent.

___ I am satisfied with my life.

___ So far I have gotten the important things I want in life.

___ If I could live my life over, I would change almost nothing.

- 31 – 35 Extremely satisfied
- 26 – 30 Satisfied
- 21 – 25 Slightly satisfied
- 20 Neutral
- 15 – 19 Slightly dissatisfied
- 10 – 14 Dissatisfied
- 5 – 9 Extremely dissatisfied
APPENDIX D

PERMISSION TO USE THE ASSESSMENT OF SPIRITUALITY AND RELIGIOUS SENTIMENTS
Appendix D

Permission to Use the Assessment of Spirituality and Religious Sentiments

Ψ

RALPH L. PIEDMONT, Ph.D.

PERMISSION AGREEMENT

Dear Ms. Vitale:

In response to your recent request, permission is hereby granted to you, Rachel Vitale, to include in your research study entitled, “Spirituality, resilience, and social support as predictors of life satisfaction in young adults who have experienced childhood trauma” the items for the *Assessment of Spirituality and Religious Sentiments* scale (ASPIRES) long form. This Agreement is subject to the following conditions:

1) You will administer this scale electronically via an internet-based survey program and will allow no more than 300 individuals to complete the ASPIRES scale

2) You will pay a licensing fee of 50 cents per copy ($150)

3) If more than 300 people take the ASPIRES, you will pay 50 cents for each additional administration

4) Items will be presented in the same order as they appear in paper version of the instrument

5) None of these materials may be sold, given away, or used for purposes other than those described above

Any and all materials used will contain the following credit line:

“ASPIRES copyrighted 1999, 2004 by Ralph L. Piedmont, Ph.D. Further reproduction is prohibited without permission of the Publisher.” This line **must appear** before the initial presentation of the items in the survey.

6) This agreement will expire on April 1, 2015

Please make two copies of this Permission Agreement. One should be signed and returned to me with your check for $150.00 to indicate your agreement with the above conditions. Keep the other copy for your records.
ACCEPTED AND AGREED:

BY: ______________________________
    Ralph L. Piedmont, Ph.D.

Date: April 2, 2014

BY: ______________________________

PRINTED NAME: ______________________________
APPENDIX E

PERMISSION TO USE THE CONNOR DAVIDSON RESILIENCE SCALE 10
Appendix E

Permission to Use the Connor Davidson Resilience Scale 10

Dear Rachel:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC in the project you have described under the following terms of agreement:

1. You agree not to use the CD-RISC for any commercial purpose, or in research or other work performed by a third party, to provide the scale to a third party. If other off-site collaborators are involved with your project, their use of the scale is restricted to the project, and the signatory of this agreement is responsible for ensuring that all collaborators adhere to the terms of this agreement.

2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification.

3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale’s content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.

4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD_RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.

5. A fee of $30 US is payable to Jonathan Davidson at 3068 Baywood Drive, Seabrook Island, SC 29455, USA, either by PayPal (at: mail@cd-risc.co), cheque, international money order or Western Union.

6. Complete this form and return via email to mail@cd-risc.com.

7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-rosc.com. We wish you well in pursuing your goals.

Sincerely yours,
Jonathan R.T. Davidson, M.D.
Kathryn M. Connor, M.D.
Agreed to by:

Signature (printed)       Date

Title

Organization
APPENDIX F

THE 2-WAY SOCIAL SUPPORT SCALE
Appendix F

The 2-Way Social Support Scale

2-way Social Support Survey (2-Way SSS; Shakespeare-Finch & Obst)
The following statements relate to your experience of giving or receiving social support. Please read each statement and then indicate the degree to which the statement is generally true for you from not at all (0) to always (5).

1. There is someone I can talk to about the pressures in my life
   0 1 2 3 4 5

2. I am there to listen to others’ problems
   0 1 2 3 4 5

3. If stranded somewhere there is someone who would get me
   0 1 2 3 4 5

4. I help others when they are too busy to get everything done
   0 1 2 3 4 5

5. People confide in me when they have problems
   0 1 2 3 4 5

6. I feel that I have a circle of people who value me
   0 1 2 3 4 5

7. I am a person others turn to for help with tasks
   0 1 2 3 4 5

8. There is someone in my life that makes me feel worthwhile
   0 1 2 3 4 5

9. I give others a sense of comfort in times of need
   0 1 2 3 4 5

10. There is at least one person that I feel I can trust
    0 1 2 3 4 5

11. When someone I lived with was sick I helped them
12. There is someone in my life I can get emotional support from

13. People close to me tell me their fears and worries

14. I have helped someone with their responsibilities when they were unable to fulfill them

15. There is someone who would give me financial assistance

16. When I am feeling down there is someone I can lean on

17. There is at least one person that I can share most things with

18. I have someone to help me if I am physically unwell

19. I look for ways to cheer people up when they are feeling down

20. There is someone who can help me fulfill my responsibilities when I am unable
APPENDIX G

PERMISSION TO USE THE 2-WAY SOCIAL SUPPORT SCALE
Appendix G

Permission to Use the 2-Way Social Support Scale

From: Shakespeare-Finch, Jane <j.shakespeare-finch@qut.edu.au>
Sent: Thursday, January 24, 2013 at 5.55pm
To: Vitale, Rachel <rvitale@kent.edu>
Subject: re: 2 Way Social Support Scale

Dear Rachel,

We do not charge for the use of our scale and are very happy for you to use it. It is currently being translated and used in about 7 countries that we are of and we have conducted a number of studies over the past few years. The 2-way SSS performs very well. Interestingly, the giving of support accounting for more variance than receiving support only appears in particular populations at this point, specifically, the older populations. We wonder if it related to generavity, etc. I have attached the scale and its scoring instructions and look forward to hearing of your findings.

Warm regards,

Jane

From: Rachel Vitale [mailto: rvitale@kent.edu]
Sent: Friday, 25 January 2013 12:28 AM
To: Jane Shakespeare-Finch
Subject: 2-way social support scale

Dr. Shakespeare-Finch,

Hi, I am a doctoral candidate in Counselor Education and Supervision at Kent State University. While searching for instruments of social support to use for my dissertation I found your article on the 2-way social support scale. I am wondering about the availability of the instrument and if it has been used for any projects since its development. If the instrument is available for use what is the cost associated with it?

Thank you for your time.

Rachel Vitale
Appendix H

Recruitment Email

Hello,
Please consider participating in my dissertation research to determine the extent to which spirituality, resilience, and social support predict life satisfaction.
You are eligible to participate in this study if you are over the age of 18 and you identify as having experienced trauma before the age of 18. **As incentive for participating two participants will be randomly selected to each receive a $25.00 gift card to Target**

Examples of childhood trauma include:
- Loss of parent, care giver, or sibling
- Physical or mental illness of immediate family member or self
- Parental divorce
- Witnessing violence, severe injury, or murder of another person
- Physical abuse
- Sexual abuse
- Emotional abuse
- any other event that you would describe as traumatic

In order to participate in the study please go to [http://www..com](http://www..com) you will then be provided with informed consent for the study. Once you have provided informed consent you will be asked a series of scaling and multiple choice questions. It will take approximately 15 minutes to complete the survey.

If you are interested in finding out more about this study please feel free to contact me at rvitale@kent.edu.

Sincerely,

Rachel Vitale
Doctoral candidate, Kent State University
This study has been approved by the Kent State University Institutional Review Board approval # 14-430
APPENDIX I

INFORMED CONSENT
Appendix I

Informed Consent

Informed Consent to Participate in a Research Study

**Study Title:** Spirituality, resilience, and social support as predictors of life satisfaction in young adults with a history of childhood trauma.

**Principal Investigators:** Steve Rainey

You are being invited to participate in a research study. This consent form will provide you with information on the research project, what you will need to do, and the associated risks and benefits of the research. Your participation is voluntary. Please read this form carefully. It is important that you ask questions and fully understand the research in order to make an informed decision. If you have questions about this research, you may contact Rachel Vitale rvitale@kent.edu or Steve Rainey jraine@kent.edu.

**Purpose:** The purpose of this research project is to understand how life satisfaction, spirituality, resilience, and social support relate to trauma. Currently, research exists on the negative outcomes associated with trauma including depression and criminal behavior, yet there is a lack of research on the factors that lead to positive outcomes such as life satisfaction.

**Procedures**

Participation in this study requires responses to questions about background information on trauma, life satisfaction, spirituality, resilience, and social support. The survey will take no more than 15 minutes to complete.

**Benefits**

The potential benefits of participating in this study may include increased self-awareness of strengths and resources including resilience, spirituality, and social support. Your participation in is intended in part to create counseling and programming aimed at the promotion of mental health and wellness in those who have experienced childhood trauma.

**Risks and Discomforts**

Some of the questions we ask may be upsetting, or you may feel uncomfortable answering them. If you wish to discuss feelings that are brought on by taking the survey please contact the Kent State University Counseling and Human Development Center at 330-672-2208.
Privacy and Confidentiality
To protect your confidentiality the survey website is encrypted and your responses can only be accessed by the researchers involved with the current study. You will have the option of entering your contact information for the purpose of the drawing of a gift card; however you are under no obligation to enter your contact information.

Compensation
At the completion of the survey you will have the option to enter an email address to be included in a raffle. Two gift cards to Target will be raffled and two winners will each receive a $25.00 gift card to Target.

Voluntary Participation
Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You will be informed of any new, relevant information that may affect your health, welfare, or willingness to continue your study participation.

Contact Information
If you have any questions or concerns about this research, you may contact Rachel Vitale, rvitale@kent.edu or Steve Rainey jrainey@kent.edu. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at (330)672-2704.

Consent Statement and Signature
If you are 18 years of age or older, understand the statements above, and freely consent to participate in the study, click on the "I Agree" button to begin the experiment.
APPENDIX J

CORRELATIONS MATRIX
## Appendix J

### Correlation Matrix

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<th>LifeStage</th>
<th>Pearson Correlation</th>
<th>Sig (2-tailed)</th>
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<td>Spirituality</td>
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<th>4. Are you currently in a supportive romantic relationship?</th>
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<th>N</th>
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<tr>
<td>Spirituality</td>
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<th>7. Please select the word or statement that describes the severity of the trauma you experienced as a child</th>
<th>Pearson Correlation</th>
<th>Sig (2-tailed)</th>
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<td>-0.112</td>
<td>0.03</td>
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<th>Pearson Correlation</th>
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* Correlation is significant at the 0.05 level (2-tailed).
* Correlation is significant at the 0.01 level (2-tailed).
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