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**EXPLORING THE RELATIONSHIP BETWEEN DEPRESSION AND
RESILIENCE IN SURVIVORS OF CHILDHOOD TRAUMA**

by

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Old Dominion University in Partial Fulfillment of the
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ABSTRACT

Exploring the relationship between depression and resilience in survivors of childhood trauma

Marquis A. Norton
Old Dominion University, 2016
Chair: Tim Grothaus Ph.D.

Although experiences of trauma are common, reactions vary due to a host of biopsychosocial and cultural factors that influence the individual reaction to the trauma (Nakai et al., 2015). One such factor is resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). This study used hierarchical multiple regression to examine the relationships between childhood trauma, recent experiences of depression, and resilience in adult university students. This study also examined the possible moderating effects on depression by resilience. Participants completed the Childhood Trauma Questionnaire, Connor-Davidson Resilience scale, and PROMIS Depression survey. Small significant relationships were found for several of the variables, including: childhood trauma and ethnicity, childhood trauma and age, childhood trauma and income, childhood trauma and education, childhood trauma and resilience, childhood trauma and depression, depression and ethnicity, depression and education, depression and income, resilience and gender, resilience and income, and resilience and trauma. The results of this study also suggest resilience has a moderate inverse relationship with depression. The data also confirmed the existing literature which noted that adults who have experienced trauma in childhood have significantly higher rates of depression in adulthood than adults who have not experienced trauma.

Keywords: childhood trauma, resilience, depression

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DEDICATION

This dissertation is dedicated to my son Lance Marquis Norton. This has been a very difficult journey, but son I did it all for you. At this point in your life you may not understand, but you have always been an inspiration for me to achieve. Do not look at this achievement as the peak of success, instead look at this as a platform for you achieve even more. I love you Lance and remember the sky is the limit!

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CHAPTER 1

INTRODUCTION

Trauma was once considered an abnormal experience, however, the first National Comorbidity Study established how prevalent trauma is in the United States (Substance Abuse and Mental Health Services Administration, 2014; Kessler et al., 1999). The study found 61 percent of men and 51 percent of women experienced at least one trauma in their lifetime (Kessler et al., 1999). While both adults and young people experience trauma at high rates, among young people a longitudinal general population study of youth in western North Carolina found 25 percent of youth experienced trauma within the last six months (Costello, Erkanli, Fairbank, & Angold, 2002).

Child abuse is one source of trauma. In 2008, an estimated 772,000 children were classified by CPS authorities as being maltreated and 1,740 children died from abuse and neglect (Center for Disease Control, 2014). The lifetime cost of mental and physical health treatment for each survivor of child abuse is approximately \$210,012, which is comparable to costly health conditions such as stroke and type 2 diabetes (CDC, 2014). Individuals who experience childhood abuse are also more likely to develop major depression, mental health disorders, and other medical problems in their lifetime than those who do not experience abuse (SAMHSA, 2014; MacMillan et al., 2001).

Summary of Literature

The effects of trauma place heavy burdens on communities at large. From 2004 through 2009, the Department of Veteran Affairs spent \$2.2 billion treating patients with trauma related mental health disorders (United States Congressional Budget Office, 2012). Trauma survivors are four times more likely to experience symptoms of

depression and other severe mental health issues than individuals who have not experienced trauma (Nakia et al., 2015). In fact, experiencing trauma during childhood is linked with an increase in psychopathology in adults (Spilman, Smith, Schirmer, & Tonui, 2015). Several studies have also researched the associations between resilience and depression, however, research is limited investigating the relationship between resilience and depression in survivors of trauma (Davydov, Stewart, Ritchie, & Chaudieu, 2010; Diehl & Hay, 2013; Min et al., 2013; Rutten et al., 2013; Southwick & Charney, 2012).

The impacts of childhood trauma are often lasting, including increasing the likelihood of experiencing depression in adulthood (Kessler et al., 2010). Not only depressive symptoms but other psychological, behavioral, and emotional concerns are more likely to be exhibited in those who experienced childhood trauma (Kessler et al., 2003).

Yet, those who are less resilient are more likely to develop symptoms of anxiety and depression than those who are more resilient (Hoge, Austin, & Pollack, 2007). Resiliency is an important construct for understanding why some develop psychological and behavioral problems after experiencing adversity or traumatic events and others do not (Luthar, Cicchetti, & Becker, 2000). Influences of resilience on depression following exposure to trauma are largely unknown and continued research is needed (Wingo et al., 2010).

Rationale for Study

Although experiences of trauma are common, reactions vary due to the variety of biopsychosocial and cultural factors that influence the individual reaction to the trauma

(Nakai et al., 2015). For example, some trauma survivors have severe and long lasting effects, whereas others overcome the circumstances and meet challenges more readily (SAMSHA, 2014). This is attributed in part to resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011).

Psychological resilience is determined by individual characteristics, family cohesion and support, and external support systems (Basim & Cetin, 2011). In Simeon et al.'s study conducted in 2007, childhood trauma was identified as having a strong inverse relationship with psychological resilience. While it is well established that individuals who experience trauma are likely to experience depression (Spilman, Smith, Schirmer, & Tonui, 2015; Norman et al., 2012; Nakia et al., 2015), resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thorsteinsson, 2014). It was the aim of this study to expand on current research regarding trauma survivors by examining the relationship between resilience and depression among this population.

Research Questions

The primary research question of this study is: How does resilience impact the relationship between childhood trauma and experiencing depression in adulthood? This question was explored by examining data gathered to answer the following specific research questions: (1) What are the relationships between gender, income level, education, ethnicity, and experiencing depression and/or resilience in adulthood after being exposed to a trauma in childhood? (2) Controlling for demographic factors, how does experiencing trauma as a child predict depression in adulthood? (3) Controlling for

demographic factors, how does resilience impact the relationship between childhood trauma and adult experiences of depression?

Methodology

In this study, the data was analyzed using hierarchical multiple regression, which was used to “predict criterion variables based on one or more predictor variable(s)” (Kelley & Maxwell, 2010, p. 282). Multiple regression analysis was selected because the goal of this study was to measure experiencing childhood trauma as a predictor of recent experiences of depression in adulthood. The research assessed the linear relationship between the predictor and criterion adjusting for the effects of the demographic variables and permitting analysis of the specific shared variance in the research variables. Using a multiple regression analysis, this study also aimed to answer the question, controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression?

This study aimed to have a minimum sample of 200 participants. The research design consisted of descriptive and multiple regression analyses of the Childhood Trauma Questionnaire (CTQ), Patient-Reported Outcomes Measurement Information System-Depression (PROMIS-Depression) and Connor-Davidson Resilience Scale scores. Furthermore, descriptive statistics were conducted on the demographic data to determine the means, standard deviation, ranges, and mode for the obtained data. The researcher tested for the following statistical assumptions: variables were normally distributed, linear relationship between independent and dependent variables, variables were measured without error (reliability), and homoscedasticity. Correlation and hierarchical

regression analysis were employed to determine the relationships, if any, among the variables and assessed if the assumptions of the primary analysis were met.

Definition of Terms

Child Abuse (includes emotional abuse, physical abuse, and sexual abuse of individuals who are younger than 18 years of age). *Emotional abuse* is negative conduct that affects the welfare or the morals of a child (Bernstein et al., 2003). *Physical abuse* is physical assault with risk for injury (Bernstein et al., 2003). *Sexual abuse* is unwanted sexual activity, with perpetrators using force, making threats or taking advantage of victims not able to give consent (American Psychological Association [APA], 2015).

Childhood trauma is experiencing trauma before the age of 18. Examples of childhood trauma include: physical abuse, physical neglect, emotional abuse, emotional neglect, and sexual abuse.

Depression is a serious medical condition in which a person feels very sad, hopeless, and unimportant and often is unable to live in a normal way (Merriam-Webster, 2015).

Post-Traumatic Stress Disorder [PTSD] is an anxiety problem that develops in some people after experiencing traumatic event(s) (APA, 2013).

Protective factors are resources and supports systems which mitigate or eliminate risk, harm, or danger in families and communities that, when present, increase the health and well-being of children and families (U.S. Department of Health & Human Services, 2015).

Resilience is the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011).

Trauma is an experience of an event(s) that causes physical, emotional, psychological distress, or harm. It is an event that is perceived and experienced as a threat to one's safety or to the stability of one's world (National Institutes of Health, 2015). Traumatic events include sexual abuse, physical abuse, emotional abuse, neglect, being a victim or witness to domestic or other violence, school violence, bullying, forced displacement, war, military trauma (SAMSHA, 2014).

University students were students who were enrolled in a college or university while participating in the study.

Summary

In conclusion, the effects of trauma can be long lasting and have large impacts on families, communities, and the nation at large (SAMSHA, 2014). Those who experience trauma are four times more likely to display depressive symptoms along with other psychological, behavioral, and emotional concerns (Smith et al., 2008). Research has supported a strong association between depression and childhood trauma however, limited research has been conducted to review the relationship between trauma survivors, depression, and resilience (Wingo et al., 2010). Investigating the relationship of resilience and depression in trauma survivors may assist mental health providers to adjust treatment to more effectively counsel trauma survivors (Howell & Miller-Graff, 2014). This study examined the relationships between childhood trauma, recent experiences of depression, and resilience.

CHAPTER TWO

LITERATURE REVIEW

Trauma can affect people of every ethnicity, age, sexual orientation, gender, psychosocial background, and geographical region (SAMHSA, 2014). Yet two people may be exposed to the same experience and have vastly different reactions (Nakai et al., 2015). This is attributed in part to psychological resilience (Nakai et al., 2015; Rutter, 1987a). Psychological resilience is defined as the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). Resilience is determined by individual characteristics, family cohesion and support, and external support systems (Basim & Cetin, 2011).

In Simeon et al.'s study conducted in 2007, childhood trauma was identified as having a strong inverse relationship with psychological resilience. While it is well established that individuals who experience trauma are likely to experience depression, research also indicates that greater resilience is associated with substantially fewer negative life outcomes, such as depression (Spilman, Smith, Schirmer, & Tonui, 2015; Smith et al. 2008; Wagnild & Young 1993). Yet, research related to the influences of resilience on the presence and severity of depression following exposure to trauma is largely unknown and continued investigation is needed (Wingo et al., 2010). It was the aim of this study to expand on current literature and investigate the relationship between depression and resilience in adult survivors of childhood trauma. In this chapter, I will first examine current research and studies related to trauma and childhood trauma. Then, I will explore current research and studies related to depression. Following this, I will

review current research and studies related to resilience. Finally, I will review literature related to both resilience and depression.

Trauma

American Psychiatric Association (2015) defines trauma as an emotional response to a negative event. Types of traumatic events include such experiences as: sexual abuse, physical abuse, emotional abuse, neglect, experiencing or witnessing domestic or other violence, school violence, bullying, forced displacement, and war, as well as parental loss, parental divorce, having caregivers dealing with psychiatric disturbance, childhood illnesses, family violence, absence of basic care, abandonment, deprivation of food or shelter, and lack of encouragement and support (Arseneault et al., 2011; Butchart, 2006; SAMSHA, 2014).

The effects of trauma place heavy burdens on communities at large. From 2004 through 2009, the Department of Veteran Affairs spent \$2.2 billion treating patients with trauma related mental health disorders (United States Congressional Budget Office, 2012). Studies have indicated that experiencing trauma is associated with substance abuse disorders and several mental health disorders such as: depression, reactive attachment disorder, post-traumatic stress disorder, acute stress disorder, and adjustment disorder (Heins et al., 2011; Delker & Freyd, 2014; Afifi, Henriksen, Asmundson, & Sareen, 2012). Trauma survivors are four times more likely to experience symptoms of depression and other severe mental health issues than individuals who have not experienced trauma (Nakia et al., 2015). Next, I will examine the impacts of trauma related to children's mental health.

Nationally, the percentage of youth experiencing a traumatic event is on average 32 percent (Copeland, Keeler, Angold, & Costello, 2007; Finkelhor, Ormrod, Turner, & Hamby, 2005; U.S. Department of Health & Human Services, 2010). Many individuals who were abused as children later develop symptoms of mental health disorders. Indeed, the risk for developing a serious mental illness increases up to 33% following child abuse (Hoven et al., 2005; Kessler et al., 2010). Symptoms associated with trauma are experienced from short term to lifetime, and individuals who experienced trauma are likely to have challenges in the emotional, cognitive, physiological, interpersonal, and behavioral domains (SAMSHA, 2014; Nakai et al., 2015; Berger, 2015). This well-established association has led to Arsenault et al., 2011, recommending that clinicians working with children who report early symptoms of psychosis should inquire about traumatic events.

Trauma impacts child development in several areas including behavioral, emotional, social, physical, and cognitive domains (Carr, Martins, Stingel, Lemgruber, & Jurena, 2013). Experiencing trauma during childhood is linked with an increase in psychopathology in adults (Spilman, Smith, Schirmer, & Tonui, 2015). A study conducted by Carr, Martins, Stingel, Lemgruber, and Juruena (2013), reviewed the association between trauma and prevalence of mental health issues in adults. Results indicated that sexual abuse had a stronger association with major depression than any other mental health disorder. Individuals who experienced physical abuse were also more likely to experience depression, along with a host of other mental health concerns such as personality disorders, schizophrenia, anxiety disorders, substance abuse disorders, other mood disorders, disruptive behavior disorders, and eating disorders (Carr et al., 2013). It

is well established that individuals who experience trauma are more likely to experience issues related to mental health, especially depression (Spilman, Smith, Schirmer, & Tonui, 2015; Crow, Cross, Powers, & Bradler, 2014). It was the aim of this study to expand on current research by including the variables of resilience and depression to investigate the lasting mental health effects of childhood trauma on adult survivors. This study aimed to investigate an adult population of childhood trauma survivors, which provided the researcher with data to examine the lasting effects of childhood trauma related to depression and resilience. Next, I will specifically focus on the association of childhood trauma on depression in adulthood.

A study conducted by Bernet and Stein (1999) sought to determine the relationship between childhood trauma and depression in adults using the Childhood Trauma Questionnaire. The study had a sample of forty-seven adults with major depression and forty-one healthy comparison subjects. The study found 75% of depressed patients met criteria for having experienced at least one type of abuse compared to 43% of comparison subjects. Depressed patients with recall of childhood trauma also experienced a significantly higher number of comorbid mental disorders than depressed patients without trauma histories (Bernet & Stein, 1999). The correlation between childhood trauma and psychopathology is evident, however, other factors such as social support, resilience, culture, and spirituality also merit additional investigation (Brewer-Smith & Koenig, 2014; Spilman, Smith, Schirmer, & Tonui, 2015).

Limited research has been conducted investigating environmental and protective factors for survivors of trauma. Resilience is an important construct for understanding why some survivors of childhood trauma develop psychological and behavioral problems

after experiencing adversity or traumatic events yet others do not (Luthar, Cicchetti, & Becker, 2000). In 2015, a study conducted by Lowe et al., was the first to analyze the interactions between childhood trauma, neighborhood crime levels, major depression, and post-traumatic stress. Researchers administered the Childhood Trauma Questionnaire, Post-Traumatic Symptom Scale, and Beck Depression Inventory to patients at a public hospital in Atlanta, Georgia. Results supported childhood trauma to be a predictor of adult mental health issues, including depression (Lowe et al., 2015). This study also found an association with living in a high-crime neighborhood and increased risk associated with childhood trauma (Lowe et al., 2015). Although this study adds environmental factors into the investigation of the impacts of childhood trauma, the research lacks the investigation of protective factors such as resources, support systems, and resilience (Lowe et al., 2015). To understand the lasting impacts of childhood trauma, future studies need to investigate protective factors such as resilience on childhood trauma survivors (Howell & Miller-Graff, 2014). By investigating the impact of resilience, research can provide insight into how functioning may be improved for and by survivors of childhood trauma (Howell & Miller-Graff, 2014). Currently, research investigating the impact of resilience on childhood trauma is limited (Wingo et al., 2010). It was the aim of this study to include resilience as a factor in the investigation of the relationship of childhood trauma and depression.

This section included a review of the impact trauma has on mental health, physical health, and the prevalence of psychopathology with in this population. A need for continued research has been identified based on gaps in previous research related to

protective factors and the resilience of childhood trauma survivors. Next, I will explore the relationship between trauma and depression in greater depth.

Depression

It is well established that individuals who experience trauma are more likely to experience depression. Major depression affects 6.5 % of the general population and is one of the leading causes of suicide attempts (Spilman, Smith, Schirmer, & Tonui, 2015; Izci et al., 2015). Depressive disorders are a major mental health problem and widely recognized as a prevalent cause of morbidity, disability, and impaired quality of life (Kessler et al., 2003). Early traumatic experiences like childhood maltreatment are consistently associated with adult psychopathology, especially with major depression (Kendler, Gardner, & Prescott, 2002; Brewin, Andrews, & Valentine, 2000; Kessler et al., 2010; Collishaw, Pickes, Messer, Rutter, Shearer, & Maughan, 2007). Experiencing childhood trauma increases the risk of life long experiences of depression (Hovens et al., 2010). Traumatic and violent experiences, especially caused by caregivers, are highly detrimental to a child's system of beliefs, expectations, emotions, and behaviors about their self and others (Mercer, 2006) and may result in the development of learned helplessness and an external locus of control along with inappropriate coping styles and higher vulnerability to stress and depressive disorders (Campbell-Sills, Cohan, & Stein, 2006).

Studies focusing specifically on childhood abuse and neglect have reported an association with the experience of childhood abuse and depression (Alloy, Abramson, Smith, Gibb, & Neeren, 2006). Bernet and Stein (1999) found that adults with major depression were significantly more likely to have a history of emotional abuse and

neglect and physical abuse. In addition, those who experience childhood abuse have earlier onset, longer duration, more severe symptoms, greater impairment, and more frequent episodes of depression (Klein et al., 2009; Bernet & Stein, 1999).

In closing, the impact of childhood trauma can be lasting, including increasing the likelihood of experiencing depression in adulthood (Kessler et al., 2010). Not only depressive symptoms but also other psychological, behavioral, and emotional concerns are likely to be exhibited in those who experienced childhood trauma (Kessler et al., 2003). This section reviewed the impact of depression as well as current literature related to depression and childhood trauma. As noted previously however, resilience can mitigate some of the effects of childhood trauma.

Resilience

A variety of biopsychosocial and cultural factors influence the individual reaction to trauma (Nakai et al., 2015). For example, children who experience maltreatment have an increased risk for developing emotional, behavioral, and social adjustment problems (Norman et al., 2012). However, some maltreated children do not exhibit these negative outcomes (Homes, Yoon, Voith, Kobulsky & Steigerwald, 2015). This is attributed in part to resilience, which encompasses the mechanisms that protect people against the psychological risks associated with adversity (Luthar, Cicchetti, & Becker, 2000). Resiliency is the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). Resilience constitutes protective processes (e.g., resources, competencies, talents and skills) that reside within the individual, within the family or peer network, and within the community (Rutter, 1987b). Next, I will review resilience in relation to survived trauma.

Resiliency is an important construct for understanding why some people do not develop psychological and behavioral problems after experiencing adversity or traumatic events (Luthar, Cicchetti, & Becker, 2000). Those who are more resilient are less likely to develop symptoms of anxiety and depression than those who are less resilient (Hoge, Austin, & Pollack, 2007). Yet, influences of resilience on depression following exposure to trauma are largely unknown and continued research is needed (Wingo et al., 2010). Continued research on resilience is vital to promote safety and change among survivors of trauma, including use strength based treatment and interventions (Yuan, 2015). Next, I will review relevant studies related to resilience.

Gonzalez, Moore, Newton, and Galli (2015), tested the validity and reliability of the Connor-Davidson Resilience Scale in competitive sports. Multiple self-report questionnaires were delivered through an online medium to a sample of competitive American distance runners, N=409. Results indicated runners with resilient qualities are more likely to experience positive emotions such as excitement and enthusiasm and are less likely to be upset, distressed, and irritable (Gonzalez et al., 2015). Positive emotions play a major role in athletes' ability to bounce back from an adverse situation and effectively perform (Gonzalez et al., 2015). Runners with resilience qualities are equipped with the ability to consistently approach competitive running events with effective and proactive ways to manage anxiety (Gonzalez et al., 2015). Concurrent validity was supported by the findings that resilience (measured with the 10-item CD-RISC) moderated the relationship between self-reported trauma and the expression of psychiatric symptoms (Gonzalez et al., 2015).

Resiliency is multidimensional in nature, one may be resilient in one domain but not exhibit resiliency in another domain (Perkins & Jones, 2004). For example, at risk youth may not experience problems in some domains but exhibit problems in other areas (Luthar, Cicchetti, & Becker, 2000). Kaufman, Cook, Army, Jones, & Pittinsky (1994) concluded that approximately two-thirds of children with histories of maltreatment were academically resilient. However, when examining these same children in the domain of social competence, only 21% exhibited resiliency. Resilience is complex in nature and research is limited. Continued research is required to expand the available literature and gather a greater understanding of resilience (Perkins & Jones, 2004). While this study did not explore the various domains of resilience, it did examine the relationship of resilience with depression in adults who experience trauma as children.

In closing, resiliency is multidimensional and complex (Perkins & Jones, 2004). It is an important construct for understanding why some develop psychological and behavioral problems after experiencing adversity or traumatic events and some do not (Luthar, Cicchetti, & Becker, 2000). Resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thorsteinsson, 2014). Next, I will review current research and studies related to depression and resilience.

Resilience and Depression

It is vital to investigate the relationship between resilience and survivors of trauma to guide effective mental health treatment (Howell & Miller-Graff, 2014). Resilience constitutes protective processes (e.g., resources, competencies, talents and skills) that reside within the individual, within the family or peer network and within the

community (Charney, 2004). Resilience has been credited with working as a buffer between trauma and depression, an active physiological process that reduces autonomic responses to stressors (Luthar & Cicchetti, 2000). Various aspects of resilience have been identified, including the ability to rebound from disappointments and the use of positive adjustment behaviors in adverse circumstances. However, studies regarding the role of resilience in mental health are limited (Brooks 2005; Tedeschi & Kilmer 2005; Alvord & Grados, 2005). Resilience has been shown to intervene between the experience of traumatic events and the individual's later return to optimism in the face of stressors and it can also reduce depression that is induced by stressful events (Jopp & Rott 2006; Andreescu et al., 2007). It is important to study the role of resilience in survivors of trauma to gain a greater understanding of the lasting impacts of trauma on survivors (Alvord & Grados, 2005).

Several studies have researched the associations between resilience and depression (Beardslee & Podorefsky, 1988; Bisschop, Kriegsman, Beekman, & Deeg, 2004; Davydov et al., 2010; Diehl & Hay, 2013). However research is limited regarding the relationship between resilience and depression after the experience of a traumatic event (Min et al., 2013; Rutten et al., 2013; Southwick & Charney, 2012). Wingo et al., 2010, examined the effects of resilience on depressive symptoms in individuals who experienced child abuse and exposure to other traumas. They surveyed 792 adults at an outpatient treatment facility. Resilience was measured with the Connor-Davidson Resilience Scale. Depression was measured using the Beck Depression Inventory, childhood abuse was measured by the Childhood Trauma Questionnaire, and other traumas with the Trauma Events Inventory (Wingo et al., 2010). Multiple linear

regression modeling with depression severity as the outcome yielded four factors: “childhood abuse ($\beta = 2.5$, $p < 0.0001$), other trauma ($\beta = 3.5$, $p < 0.0001$), resilience ($\beta = - 0.5$, $p < 0.0001$), and other trauma \times resilience interaction term ($\beta = - 0.1$, $p = 0.0021$)” (Wingo et al., 2010, p. 413). All factors were significantly associated with depression severity, after adjusting for the following variables: age, sex, ethnicity, education, employment, income, marital status, and family psychiatric history (Wingo et al., 2010). The results indicated childhood abuse and trauma exposure contributed to depressive symptoms’ severity while resilience mitigated it. However, the population accessed for this study was predominantly low income African Americans who were being treated for substance abuse, which limits generalizability.

While the Wingo et al., study did focus on childhood trauma, it also investigated trauma exposures experienced in adulthood (e.g., domestic violence, exposure to substances, and emotional abuse). It was the aim of this study to expand on current research by focusing specifically on childhood trauma, using a broader population. In addition, this study incorporated newer instruments to measure depression. This study used a Patient Reported Outcome Measurement System, which is a highly reliable, precise measure which allows the patient to report how they feel and the severity of their experiences (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2012). In addition, Eisenberg, Gollust, Golberstein, and Hefner (2007) argued that there is a need for further research focused on mental health in young adult populations, particularly among those within a university setting. This study investigated a population of university students, which provided more generalizable results as it captured data from a more racially and ethnically diverse population.

Depression was found to be prevalent among undergraduates (15.6%) and graduate students (13.0%) in university settings (Eisenberg, Gollust, Golberstein, & Hefner, 2007). While Wingo et al, investigated a population which was receiving substance abuse treatment and used an older measure of depression, this study expanded on current research by investigating a potentially more generalizable population while utilizing an emerging measure. The measure used in this study (PROMIS) is recommended in the Diagnostic and Statistical Manual of Mental Health Disorders 5 (DSM 5) (APA, 2013).

Gender, income level, education progression, and ethnicity were examined as variables. Previous studies of male and female individuals who experience trauma as children produced contradictory conclusions regarding differences in levels of depressive symptoms (Reynolds, Wallace, Hill, Weist, & Nabors, 2001; Spilman, Smith, Schirmer, & Tonui, 2015). Additional inquiries are needed given these conclusions.

Zimmerman & Katon, (2005) argued that experiences and persistence of depression are higher among persons with low incomes. Also, poverty and experiencing stressful life circumstances have been found to be related to depression. (Siefert, Bowman, Heflin, Danziger, & Williams, 2000). However, Eisenberg, Gollust, Golberstein, & Hefner, (2007) suggested that additional studies of depression and income level are merited due to the dearth of such inquiries in the literature currently. Based on current literature, income appears to be related to depression but additional research is needed.

Riolo, Nguyen, Greden, and King (2005) found major depressive disorder was significantly higher in Caucasians than in other ethnicities. However, the prevalence of

depression differs significantly based on the type of depression (dysthymia vs. major depression). Previous research also indicated a need for more research related to ethnicity and co-occurring disorders such as anxiety and depression (Smith et al., 2006).

In conclusion, trauma affects families, communities, and the nation at large (SAMSHA, 2014). Those who experienced trauma are four times more likely to display depressive symptoms along with other psychological, behavioral, and emotional concerns (Smith et al. 2008). Research has supported an association between depression and childhood trauma. However, limited research has been conducted to review the relationship between trauma survivors and depression and resilience (Wingo et al., 2010). It is important to investigate this relationship to guide mental health treatment interventions for individuals who have experience trauma (Wu, 2011). Investigating the role of resilience in trauma survivors may also provide mental health providers with greater insight allow them to adjust treatment to more effectively treat trauma survivors (Howell & Miller-Graff, 2014). This study examined the relationships between childhood trauma, depression, and resilience. Next, I will review the methodology for this study.

CHAPTER THREE

METHODOLOGY

This chapter will describe the design and methodology for this quantitative research study. The aim of this study was to examine the relationships between childhood trauma, recent experiences of depression, and resilience. This study also examined the possible moderating effects on depression by resilience. This chapter will include the following: research, data collection procedures, instrumentation, and research methods. In addition to these topics, ethical considerations and research limitations are discussed.

Research

Many studies, including Vythillngjam et al., (2002), found adults who experienced childhood trauma suffered from depression at disproportionately high rates. In addition, depression was found to be prevalent among undergraduates (15.6%) and graduate students (13.0%) in university settings (Eisenberg, Gollust, Golberstein, & Hefner, 2007). This study aimed to expand on current literature by including an additional variable of resilience. The purpose of this study, which employed a retrospective, correlational design, was to investigate the relationships between the experience of childhood trauma and the prevalence of depression and resilience in adulthood, as well as investigate the effect of resilience on depression. Eisenberg, Gollust, Golberstein, and Hefner (2007) argued that there is a need to continue research focused on mental health in young adult populations, particularly among those within a university setting.

In this study, exposure to childhood trauma was assessed using the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998). Recent experiences of

depression were measured using the PROMIS Emotional Distress-Depression-Short Form (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2012). Resilience was assessed using the Connor-Davidson Resilience 10 item Scale (CD-RISC-10) (Connor & Davidson, 2003). The assessments were administered via an online survey format. Participants were asked to answer the CTQ based on recollection of their childhood experiences. PROMIS assesses depression based on the past 7 days, and the CD-RISC-10 item scale measures resilience based on the present.

Population and Sample

This study proposed accessing a population of current university students across the nation, ages 18 and older. The research study was conducted using a correlational design and aimed to have a minimum sample of 200 participants. The samples size was selected given the number of variables analyzed, statistical power (the likelihood the study will identify an effect when there is an effect to be identified), and to assist in enhancing the generalizability of results. The sample was selected based on criterion and convenience sampling. The criteria for the sample were as follows: adult (18 and over), currently enrolled in a college or university, able to read and write in English or Spanish. These are the only two languages available for all three instruments. This study investigated adults in order to gain insight into the lasting effects of trauma on those who experienced trauma as children.

Variables

The criterion variable is the scores derived from the PROMIS Emotional Distress-Depression-Short Form. The predictor variables are scores on the Childhood Traumatic

Questionnaire (CTQ), and Connor-Davidson Resilience Scale (CD-RISC). Gender, income level, education progression, and ethnicity were also examined as variables.

Previous studies of male and female individuals who experience trauma as children produced contradictory conclusions regarding differences in levels of depressive symptoms (Reynolds, Wallace, Hill, Weist, & Nabors, 2001; Spilman, Smith, Schirmer, & Tonui, 2015). Additional inquiries are needed given these conclusions. Eisenberg, Gollust, Golberstein, and Hefner, (2007) suggested that additional studies of depression and income level are also merited due to the dearth of such inquiries in the literature currently. Previous research has also indicated a need for more research related to ethnicity and co-occurring disorders such as anxiety and depression (Smith et al., 2006).

The researcher used a hierarchical multiple regression to control for the effects of covariates in the results and to analyze the effects of demographic and independent variables when predicting the dependent variable. The researcher controlled for demographic variables in order to examine how much variation in the dependent variable can be explained by the addition of one or more of the independent variables. To answer research question one, the researcher included the following variables in the analysis for the prediction of recent experiences of depression (criterion variable): gender, age, race/ethnicity, income, education, childhood trauma, and resilience. To determine bivariate relationships among variables, the researcher utilized the Pearson Correlation matrix to determine if there were significance relationships between variables. To answer research question two, the researcher included the demographic variables (gender, age, race/ethnicity, income, and education) and childhood trauma into the analysis for the prediction of recent experiences of depression. The researcher then controlled for

demographic variables to examine the relationship between childhood trauma and recent experiences of depression. To control for variables, the demographic variables were first analyzed without the independent variables in the analysis. To answer research question three, two analyses were utilized. The researcher first included the demographic variables along with resilience in the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables to examine the relationship between resilience and recent experiences of depression. Secondly, the researcher included the demographic variables, childhood trauma, and resilience into the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables and childhood trauma in order to distinguish the variation of childhood trauma when predicting for recent experiences of depression. The research also used the Pearson Correlation matrix to determine the strength of relationships between childhood trauma, resilience, and recent experiences of depression.

The researcher reviewed the samples sizes of the demographic variables, and found that the size was too small for a meaningful analysis of several groups. To effectively compare demographic variables, the researcher created dichotomous categories for each of the following variables: gender, education, and race/ethnicity. Income was more evenly represented, therefore individual groups were analyzed within this category.

The researcher transitioned gender, education, and race/ethnicity into dichotomous categories to assess the linear relationships among the demographic variables in the regression analysis. To create dichotomous categories for gender, the researcher examined the most chosen group in the category of gender, which was female.

The researcher examined the data and created new labels for each participant, if the participant was a female they received the code “0”, if not (male, transgender) they received the code “1”. To create a dichotomous variable for race/ethnicities, the researcher examined the most chosen group of the race/ethnicity, which was Caucasian. The researcher examined the data and created new labels for each participant, if the participant was a Caucasian they received the code “0”, if not (African American, Asian, Latino, Multi-Racial) they received the code “1”. To create a dichotomous variable for education, the researcher divided the category into two groups, undergraduate or graduate. The researcher examined the data and created new labels for each participant, if the participant had some graduate study or earned a graduate degree they received the code “0”, if not (some college, bachelor degree) they received the code “1”.

Research Questions:

Research Question 1: What are the bivariate correlations among all variables?

- a. Specifically, what are the relationships between gender, age, income level, education, ethnicity, childhood trauma, and experiencing depression and resilience in adulthood?

Research Question 2: Controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood?

Research Question 3: Controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression?

Data Collection Procedures

The primary researcher submitted the research proposal to his College's Human Subjects Exempt Committee and received approval. Students attending universities across the United States were then invited to participate in an online survey. Students in other nations were not recruited due to language limitations, the instruments are only available in Spanish or English. However, international students enrolled in universities located in the United States had access to the survey. Participants were accessed through a professional Counselor Education and Supervision Network listserv (CESNET), contact with department and program heads and faculty in a convenience sample, and Facebook. CESNET was identified as a platform to gain participants because many subscribers are counseling students enrolled in colleges or universities. The researcher sent a general invitation to all CESNET subscribers. This initial invitation was followed up by two reminder invitations to CESNET users. In the reminder invitations, the researcher asked for additional participants to participate in the study. Facebook was identified as a platform to gain participants because many of the researcher's "Facebook Friends" are currently pursuing graduate education and would meet the criteria to be a participant in the survey. On Facebook, the research created a status with the link and brief description of the study, the researcher invited Facebook followers who were currently enrolled in a college or university to participate in the study.

In addition to social media platforms, the researcher directly emailed the head faculty of several counseling departments. In this email, the researcher provided the faculty with a description of the dissertation study, detailed IRB approval information, a link to the survey, and a request that the information be distributed to individuals enrolled in their program. The researcher utilized the CACREP directory (cacrep.org/directory) to

identify counseling based programs and find the counseling departments' website. The researcher individually contacted 84 universities across the nation, which were selected based on the counseling programs being identified in the directory. The researcher contacted clinical mental health programs, human services programs, community counseling programs, counseling psychology programs, and counselor education and supervision programs. The researcher used the schools' websites to identify the email address of the head faculty of each department. Some universities had multiple counseling program concentrations. When this occurred, the researcher individually contacted the coordinator of each program. The researcher directly contacted the head faculty of 62 clinical mental health counseling programs, 15 counselor education and supervision programs, 22 community counseling programs, 3 counseling psychology programs, and 2 human services programs. In an attempt to access more participants the researcher distributed one follow up email requesting participation. In the follow up email, the researcher also included all of the full time faculty at the respective institutions (assistant professors, associate professors, professors, and emeritus professors), and requested the faculty distribute the information to the students enrolled in their program. Follow up emails were distributed 5 days after the initial email.

The request for participation was distributed through email and social media post. The researcher used an online survey website, SurveyMonkey, to distribute the electronic survey packets. All interested participants were provided with a link to SurveyMonkey. Participants were mandated to first agree to the informed consent before they were granted authorization to complete the survey packet. The survey packet contained a cover

letter, the informed consent document, demographic questionnaire, and the three instruments described above. Participants completed and submitted the survey online.

Data Collection

All participants were mandated to agree to the informed consent agreement (see Appendix B) prior to participating in the research study. Participants were asked to review the informed consent and click on the 'I agree' button to acknowledge their voluntary consent to participate in the study. Only potential participants who selected the appropriate button in the e-survey were included in the study.

The survey packet contained a cover letter (Appendix A), the informed consent document (Appendix B), demographic questionnaire (Appendix C), and the instruments. The cover letter contained a brief summary of the study, a description of each instrument, and a request for their support and participation in the study.

The data was collected in the spring semester of 2016 over a six-week period. No names were collected during in the study. All participant data was numerically coded and other identifying information were removed from all forms to further ensure confidentiality and anonymity. Information collected from participants was secured on a password protected website. There were no time constraints for completing survey.

Instrumentation

The researcher provided the participants with survey packets, which included the following: (1) the cover letter (Appendix A) (2) the informed consent document (Appendix B), (3) the demographic questionnaire (Appendix C) to be completed entirely, (4) the CTQ, (5) the PROMIS Emotional Distress-Depression-Short Form, and (6) the Connor-Davidson Resilience 10 item scale.

Informed Consent

The informed consent form (Appendix B) summarized the study's procedures, explained the activities required of the participants, and described how the results of the study would be used. In addition, the form advised the participants of the risks of the study and advised participants of their right to withdraw from the study at any time. The document was agreed to electronically by choosing "I agree" to agree to participate in the study. If a participant did not click "I agree" to agree to participate in study, the participant was not able to continue with the survey. As a preventive measure in case the completion of the instruments lead any of the participants to experience a crisis, hotline contact numbers for the National Suicide Prevention Lifeline and local crisis centers were included in this document, participants were instructed to contact the hotline if they had suicidal thoughts.

Demographic Questionnaire

A demographic questionnaire was used to collect information. The questionnaire included the following; (1) gender, (2) total household income and number in household, (3) highest level of education obtained, (4) ethnicity, and (5) age (Appendix C).

Childhood Traumatic Questionnaire

The Childhood Trauma Questionnaire (Bernstein & Fink, 1998), was developed as a self-reporting questionnaire to identify adolescents and adults with histories of trauma. CTQ is a standardized self-report inventory that measures the severity of five different types of childhood trauma and participants' tendency to underreport maltreatment (Bernstein & Fink, 1998). The instrument consists of 5 scales: physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect (Bernstein

& Fink, 1998). Alpha coefficients for the five subscales in a subsequent study were .58 (Physical Neglect), .69 (Physical Abuse), .83 (Emotional Abuse), .85 (Emotional Neglect), and .94 (Sexual Abuse) (Scher, Stein, Asmundon, McCreary, & Forde, 2001). Participants respond to each item in the context of when they were children (retrospective) and answer each of the five questions for each scale according to a five-point Likert scale ranging from “never” = 1 to “very often” = 5, producing scores of 5 to 25 for each trauma subscale. The three items comprising the Minimization/Denial scale are dichotomized (“never” = 0, all other responses = 1) and summed; a total of one (1) or greater “suggests the possible underreporting of maltreatment (false negatives)” (Bernstein & Fink, 1998, p. 1134).

Test-retest reliability on the scale ranges from .79 to .86 over an average of 4 months, which suggest that the CTQ is resistant to reporting biases (Scher, Stein, Asmundon, McCreary, & Forde, 2001). The CTQ has demonstrated internal consistency reliability across a range of samples, with reliability coefficients ranging from a median of .66 for the physical neglect subscale to a median of .92 for the sexual abuse subscale (Bernstein & Fink, 1998).

As defined in the CTQ manual, mean scores for the valid subscales for women are as follows: the mean score on the Sexual Abuse subscale ($M = 7.4$, $SD = 4.9$); Physical Abuse ($M = 7.4$, $SD = 4.0$); Emotional Abuse ($M = 10.1$, $SD = 5.4$); Emotional Neglect ($M = 11.0$, $SD = 5.3$); and Physical Neglect ($M = 7.0$, $SD = 3.1$) (Bernstein & Fink, 1998, p. 28). The mean scores for the valid subscales for men are as follows: the mean score on the Sexual Abuse subscale ($M = 6.6$, $SD = 3.7$); Physical Abuse ($M = 8.7$, $SD = 4.1$); Emotional Abuse ($M = 9.9$, $SD = 4.9$); Emotional Neglect ($M = 11.1$, $SD = 5.1$); and

Physical Neglect ($M = 7.6$, $SD = 3.1$) (Bernstein & Fink, 1998, p. 28). In assessing the construct validity of the CTQ, a study concluded the total CTQ scales adequately captures dimensions of childhood maltreatment (Spinhoven, Pennix, Hickendorff, Van-Hermert, Bernstein, & Elizinga, 2014).

A study was conducted by Bernstein, Ahluvalia, Pogge, & Handelsman (2003) to test the validity of the scale. A principal-components analysis of the Childhood Trauma Questionnaire (CTQ) items yielded “five rotated factors—emotional abuse, emotional neglect, sexual abuse, physical abuse, and physical neglect—closely replicating the factor structure in an earlier study of adult patients” (Bernstein, Ahluvalia, Pogge, & Handelsman, 2003, p. 346). The internal consistency of the CTQ factors was high both in the entire sample and in every subgroup examined. When CTQ factor scores were compared with therapists' ratings in a series of “logistic regression analyses, relationships between the two sets of variables were highly specific, supporting the convergent and discriminant validity of the CTQ” (Bernstein, Ahluvalia, Pogge, & Handelsman, 2003, p. 347).

PROMIS

Each of the PROMIS surveys are included in the assessment measures section in the Diagnostic and Statistical Manual of Mental Health Disorders 5 (DSM 5). The assessments are labeled cross-cutting symptoms measures. Cross-cutting symptom measures' purpose is to draw attention to symptoms that are important across diagnoses. They are intended to help identify additional areas of inquiry that may guide treatment and prognosis. The cross-cutting measures have two levels: Level 1 questions are a brief survey of 13 domains for adult patients and 12 domains for child and adolescent patients,

and Level 2 questions provide a more in-depth assessment of certain domains (APA, 2013).

PROMIS Level 2 surveys assess symptoms such as depression, anger, mania, anxiety, somatic symptoms, sleep disturbance, repetitive thoughts and behaviors, substance abuse, and inattention (APA, 2013). Certain measures address how often the individual has been bothered by a symptom within a time period of 7 days prior to completing the instrument and others ask the individual to pick a statement in a cluster that best represents the way he or she has been feeling within the past 7 days (Schmit & Balkin, 2014). This study used the Level 2 assessment of depression.

The PROMIS instruments rely extensively on legacy scales. The current banks of items have reduced or eliminated questions which have proved to reduce reliability. PROMIS scales were created by expert panel reviews, cognitive interviews, and item calibration analyses which highlighted problematic wording which thus enabled changes to enhance item reliability and validity (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2014). The primary researcher contacted PROMIS Health Organization [PHO] and PROMIS Cooperative Group to obtain written permission to use the instrument.

PROMIS-Depression

This PROMIS Depression Short Form is an 8-item assessment which focused on the domain of depression in individuals age 18 and older. The participants were asked to answer each question regarding their experience within the past 7 days (APA, 2013). Each item on the measure is rated on a 5-point scale (1=never; 2=rarely; 3=sometimes; 4=often; and 5=always) with a range in score from 8 to 40, with higher scores indicating

greater severity of depression (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2012).

The legacy instruments used to create this scale were the Center for Epidemiologic Studies Depression Scale, the Beck Depression Inventory–II, and the 9-item Patient Health Questionnaire (Choi, Schalet, Cook, & Cella, 2014). The instrument consisted of seven primary domains: anxiety, physical function, pain impact, appetite disturbance, fatigue, sleep disturbance, and satisfaction with participation in social roles.

Specifically the instrument is used to assess various aspects of depression. It addressed self-reported negative mood (sadness, guilt), views of self (self-criticism, worthlessness), social cognition (loneliness, interpersonal alienation), as well as decreased positive affect and engagement (loss of interest, meaning, and purpose). (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2012)

The PROMIS Depression survey had key statistical characteristics: reliability, precision, information, and standard error (PROMIS Health Organization, 2014). The instrument had an internal consistency reliability of .90, an alpha reliability of .98 (PROMIS Health Organization, 2014), and alpha coefficients of .95 (Pilkonis et al., 2011). Minimum research has been conducted with these instruments due to their recent creation. This instrument is one of the emerging measures offered in the DSM 5 for further research (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2012).

Connor-Davidson Resilience Scale

The Connor-Davidson Resilience scale was developed using constructs previously researched in relation to resilience, such as hardiness, self-efficacy, the strengthening effect of stress, close relationships to others, and an action oriented approach to situations (Kobasa, 1979; Connor & Davidson, 2003). The scale is comprised of 5 subscales: personal competence and tenacity, trust in one's instincts and strengthening effect of stress, accepting change positively, control, and spiritual influence (Connor & Davidson, 2003). Researchers examining the efficacy of resilience training have utilized the CD-RISC to trace resilience changes over time, supporting the validity of the instrument in an applied context (Davidson et al., 2005).

Gonzalez, Moore, Newton, and Galli (2015), tested the validity of the scale using confirmatory factor and item level analyses. They found the CD-RISC-10-item scale was psychometrically superior to the 25-item CD-RISC versions. The CD-RISC-10-item exhibited measurement invariance for gender, with significant configural, strong, and weak analyses (Gonzalez et al., 2015). In this study using structure equation modeling, the CD-RISC-10-item scale “moderately and positively correlated with positive affect and was inversely related to negative affect and performance anxiety, establishing convergent and divergent validity” (Gonzalez et al., 2014, p. 31). A CFA analysis confirmed the construct validity of the 10-item CD-RISC, “ $\chi^2(35) = 176.10, p < .001$, RMSEA = .050, 90% CI = .043-.057, CFI = 0.50, SRMR = .028, CFI = .97, and determinacy = .93” (Campbell-Sills & Stein, 2007, p. 1023). The 10-item CD-RISC exhibited internal reliability ($\alpha = .85$). Concurrent validity was supported by the findings that resilience (measured with the 10-item CD-RISC) moderated the relationship between self-reported trauma and the expression of psychiatric symptoms (Gonzalez et al., 2015).

Participants who rated higher levels of resilience reported lower levels of mental health symptomology (Gonzalez et al., 2015).

Method

Data Analysis

In this study, the data was analyzed using hierarchical multiple regression, which was used to predict criterion variables based on one or more predictor variables (Kelley & Maxwell, 2010). Multiple regression analysis was selected because the goal of this study is to measure experiences of childhood trauma as a predictors of depression in adulthood. This study also aimed to explore the effects of resilience on depression. The research assessed the linear relationship between the predictor and criterion variables adjusting for the effects of the demographic variables and permitting analysis of the specific shared variance in the research variables. The researcher tested for the following statistical assumptions: variables are normally distributed, linear relationship between independent and dependent variables, variables are measured without error (reliability), and homoscedasticity. The research design consisted of both descriptive and multiple regression analyses of the CTQ, PROMIS-Depression, and Connor-Davidson Resilience Scale. Furthermore, descriptive statistics were conducted on the demographic data to determine the means, standard deviation, ranges, and mode for the obtained data.

The significance level of this study was set to .01, increasing the power of results, and minimizing the likelihood of Type 1 error. In this study a total of eight variables were examined and the alpha level was lowered from .05 to .01 to protect the data from false positives. The confidence interval in this study was set to 99%, this researcher did not utilize a Bonferroni correction as this is typically used to adjust the P value when running

multiple comparisons on one data set. Similar to several recent studies the researcher used adjusted the confidence interval to 99% without utilizing a Bonferoni correction due to the limited amount of tests ran on the data set (Ogle, Rubin, & Siegler, 2013; Linzetzky, Pregamin-Hight, Pine, & Bar-Haim, 2015; Gallais et al., 2015). Correlation and hierarchical regression analysis were employed to determine the relationships, if any, among the variables and to assess if the assumptions of the primary analysis were met. Using multiple regression analysis, this study aimed to answer the following research questions: What are the bivariate correlations among all variables? Controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? Controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression? The Childhood Trauma Questionnaire has three items comprising the Minimization/Denial scale, in the event denial or minimization is indicated, the researcher will not use any of the participant's data in the study.

SPSS 21.0 was utilized to analyze the data once all data collection procedures had been completed. The data was downloaded from SurveyMonkey and transferred to SPSS. Data was then analyzed for completeness and partially completed surveys were removed, as well as denial indicated surveys. Using SPSS frequencies functions, the demographic characteristics of survey participants were obtained, which included ethnicity, gender, household income, and current academic status.

Research Questions and Hypothesis

Research Question 1: What are the bivariate correlations among all variables?

- a. What are the relationships between gender, income level, age, education, ethnicity, childhood trauma and experiencing depression and/or resilience in adulthood?

H1: There will be significant relationships between gender, income, age, education, ethnicity, and experiencing childhood trauma, depression, or resilience.

Research Question 2: Controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood?

H2: Adults who have significantly higher rates of depression in adulthood are more likely to have experienced trauma in childhood.

Research Question 3: Controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression?

H3: Resilience will moderate depressive symptoms in adults who have experienced trauma as children.

Ethical Considerations:

In accordance with the American Counseling Association's Ethical Code (2014) and the Human Subject Board Exempt Committee of the researcher's university, precautions were used in protecting the welfare of the participants. A thorough explanation of the study's procedure was provided and informed consent was solicited from each participant. Sound instrumentation was used in an appropriate manner and was scored and interpreted by qualified individuals. The primary researcher and dissertation committee were the only individuals involved in the distribution and scoring of instruments. The primary researcher has completed doctorate level courses in applied statistics and also in advanced counseling research design. Instruments were distributed

adhering to the surveys' specific instructions. Confidentiality of the participants identifying data was ensured through the use of coding on all instrumentation and data collected. Due to nature of the topics broached in the survey, the researcher provided participants with the National Suicide Hotline number, in the event they began to feel unsafe or have thoughts of wanting to harm themselves.

Limitations

This study focused solely on prediction of depression and resilience, additional variables such as hope, substance use, and other mental health disorders are needed to expand on the current study. The data was gathered through self-report, the results could have been affected by any participants' decision to respond in an untruthful manner. The data collected relied on information gathered retrospectively, which provides limitations to accuracy of data due to participants' ability to recall previous events. The instruments used are based on specific DSM 5 criteria, created to diagnose mental health based on American standards, therefore cultural encapsulation is another limitation of the study. The CTQ has low alpha scores on the physical neglect subscale, enhancing the odds that the observed result is due to chance. In addition, it also only measures trauma based upon "childhood maltreatment" and may omit experiences of other sources of childhood trauma. The PROMIS depression survey inquires only about the last 7 days, which may not accurately represent experiences of depression for participants. This research did not offer participants an avenue to respond freely (e.g., interview, written response). This study also did not offer alternative methods to complete the survey, interpretation of questions depended on the participants' level of reading comprehension. The average household income per member was not included in the analysis of household income.

Similar to other studies that researched similar variables, this presents a limitation as it is not an accurate representation of individual income, and the socioeconomic status of individuals living with multiple members in a household with higher reported incomes are misrepresented (Wingo et al., 2010; Coates, Phares, & Dedrick 2013).

Only electronic surveys were used in this study, which proposes a threat to sampling, respondent availability, increased confusion (no one physical present to directly answer questions), and possible survey fraud.

In addition, all participants in this study were volunteers gathered via convenience sampling. This poses a threat to external validity because research has revealed that volunteers do not have the same characteristics as the general population (Rosenthal & Rosnow, 1976). Although all participants in this study were adults, the college student population does not accurately reflect the non-college adult population. Also, only students with majors in the helping profession were accessed. These students may not reflect students in other majors. In this study, a large population of university students were accessed, however the study received a very small response rate. A small response rate is a limitation because of non-response bias. This sample may not accurately represent of the student body from the universities contacted. All participants were recruited through online request to academic departments, the researcher is unable to determine how many potential participants were introduced to the survey because the researcher did not have access to the students email addresses directly. The researcher requested distribution of the survey through faculty.

Summary

In closing, this study aimed to understand the relationships, if any, between experiencing childhood trauma, and depression and/or resilience in adulthood. An explanation of the research, including research questions and hypotheses, was provided. This chapter reviewed the data collection process and instrumentation and validity of instruments used in this study. Lastly, the researcher discussed the ethical considerations and limitations of this study.

CHAPTER FOUR

RESULTS

The purpose of this study was to examine the relationships between childhood trauma, depression, and resilience. This chapter details the results of this research study. This chapter begins by discussing the respondents and recruitment process and continues with the results for each research question.

Data Collection

The data was collected over a six-week period in the spring of 2016. Requests for participation were distributed via email to various counseling, human services, and psychology programs across the nation. The researcher used SurveyMonkey to collect responses. Participants were accessed through a professional Counselor Education and Supervision Network listserv; through contact with faculty in a convenience sample of counseling, human services, and psychology programs; and also Facebook. CESNET was identified as a platform to gain participants because many subscribers are counseling students enrolled in college or universities. The researcher sent a general invitation to all CESNET subscribers, this initial invitation was followed up by two reminder invitations to CESNET users. In the reminder invitations, the researcher asked for additional participants to participate in the study.

Facebook was identified as a platform to gain participants because many of the researchers' "Facebook Friends" are currently pursuing graduate education and would meet the criteria to be a participant in the survey. On Facebook, the researcher created a status with the link and brief description of the study. The researcher invited Facebook

followers who were currently enrolled in a college or university to participate in the study.

In addition to social media platforms, the researcher directly emailed the head faculty of several counseling departments. In this email the researcher provided the faculty with a description of the dissertation study, detailed IRB approval information, a link to the survey, and a request that the information be distributed to individuals enrolled in their program. The researcher individually contacted 84 Universities across the nation. The researcher utilized the CACREP directory (cacrep.org/directory) to identify counseling based programs and find the counseling departments' websites. The researcher used the schools' websites to identify the email address of the head faculty of each department. Some universities had multiple counseling program concentrations. When this occurred the researcher individually contacted each program's leader. The researcher directly contacted the head faculty of 62 clinical mental health counseling programs, 15 counselor education and supervision programs, 22 community counseling programs, 3 psychology programs, and 2 human services programs. In an attempt to access more participants, the researcher distributed one follow up email requesting continued need of participants. In the follow up email, the researcher also included all full time faculty (assistant professors, associate professors, professors, and emeritus professors), and requested the faculty distribute the information to the students enrolled in their program. Follow up emails were distributed 5 days after the initial email. A total of 253 individuals responded to the survey. Thirty-eight surveys were determined to be incomplete and 27 surveys determined to include minimizing/denying information on the CTQ. Incomplete surveys and participants who minimized on the Childhood Trauma

Questionnaire were removed from the data. A total of 188 were determined to be complete and valid.

Descriptive Data

Completed surveys included a demographic questionnaire in which respondents identified their gender, age, race/ethnicity, household income and number in the household, and education level (see Table 1). The demographic information revealed the most frequently chosen demographic groups were female (88.8%, $n=167$), Caucasian (67.0%, $n=126$), had a household income of \$75,000 and above (24.5%, $n=46$), completed some graduate study (39.9%, $n=75$), and age 24 (7.4%, $n=14$).

Individuals reporting and income between \$20,000-\$30,000 had a mean score of 19.52 on the PROMIS scale, a mean score of 62.88 on the CTQ Scale, and a mean score of 38.53 on the CD RISC scale. Individuals reporting and income between \$30,000-\$40,000 had a mean score of 19.17 on the PROMIS scale, a mean score of 63.89 on the CTQ Scale, and a mean score of 39.02 on the CD RISC scale. Individuals reporting and income between \$40,000-\$50,000 had a mean score of 18.93 on the PROMIS scale, a mean score of 62.77 on the CTQ Scale, and a mean score of 39.43 on the CD RISC scale. Individuals reporting and income between \$50,000-\$75,000 had a mean score of 18.12 on the PROMIS scale, a mean score of 61.52 on the CTQ Scale, and a mean score of 39.52 on the CD RISC scale. Individuals reporting and income between \$75,000 and above had a mean score of 18.66. on the PROMIS scale, a mean score of 62.14 on the CTQ Scale, and a mean score of 39.16 on the CD RISC scale.

The researcher created dichotomous categories for each of the following variables: gender, education, and race/ethnicity. Due to low representation in each group,

the researcher transitioned gender, education, and race/ethnicity into dichotomous categories. Income was more evenly represented therefore individual groups were analyzed for this variable. Income was divided into six categories: (0-\$20,000, \$20,000-\$30,000, \$40,000-\$50,000, \$50,000-\$75,000, \$75,000 and above). Also, age was not transitioned into a dichotomous category because it was a continuous variable. To create dichotomous categories for gender, the researcher examined the most chosen group in the category, which was female. The researcher examined the data and created new labels for each participant, if the participant was a female they received the code “0”, if not (male, transgender) they received the code “1”. To create a dichotomous variable for race/ethnicity, the researcher examined the most chosen group of the race/ethnicity, which was Caucasian. The researcher examined the data and created new labels for each participant, if the participant was a Caucasian they received the code “0”, if not (African American, Asian, Latino, Multi-Racial) they received the code “1”. Initially there were four groups in the education category: some college, bachelor degree, some graduate study, and graduate degree. To create a dichotomous variable for education, the researcher divided the category into two groups undergraduate or graduate. The researcher examined the data and created new labels for each participant, if the participant had some graduate study or earned a graduate degree they received the code “0”, if not (some college, bachelor degree) they received the code “1”.

The researcher used a hierarchical multiple regression to control for the effects of covariates in the results and to analyze the effects of demographic and independent variables when predicting the dependent variable. The researcher controlled for demographic variables in order to examine how much variation in the dependent variable

can be explained by the addition of one or more independent variables. To answer research question one, the researcher included the following variables into the analysis for the prediction of recent experiences of depression (criterion variable): gender, age, race/ethnicity, income, education, childhood trauma, and resilience. To determine bivariate relationships among variables, the researcher utilized the Pearson Correlation matrix to determine if there were significance relationships between variables. To answer research question two, the researcher included the demographic variables (gender, age, race/ethnicity, income, and education) and childhood trauma into the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables to examine the relationship between childhood trauma and recent experiences of depression. To control for variables, the demographic variables were first analyzed without the independent variables in the analysis.

To answer research question three two analyses were utilized. The researcher first included the demographic variables along with resilience in the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables to examine the relationship between resilience and recent experiences of depression. Secondly, the researcher included the demographic variables, childhood trauma, and resilience into the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables and childhood trauma in order to distinguish the variation of childhood trauma when predicting for recent experiences of depression. The research also used the Pearson Correlation matrix to determine the strength of relationships between childhood trauma, resilience, and recent experiences of depression.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Using a hierarchical multiple regression analysis only including demographic variables (gender, income, education, ethnicity, and age) were initially included to predict recent experiences of depression. The results of this analysis were statistically insignificant $F(7.177) = 1.746, p > .01$. Controlling for demographic variables and the including childhood trauma into the analysis in the prediction of recent experiences of depression led to a statistically significant increase R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. Controlling for demographic variables and including resilience into the analysis for the prediction of recent experiences of depression led to a statistically significant increase R^2 of .098, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 21.386, p < .01$. Finally, controlling for demographic variables and childhood trauma, and including resilience in the prediction of recent experiences of depression led to a statistically significant increase R^2 of .115, and a statistically significant prediction of recent experiences of depression $F(1, 175) = 26.839, p < .01$.

Table 1*Demographic Information*

Demographic Variables	Frequency	Percentage
Gender		
Female	167	88.8
Male	20	10.6
Transgender	1	.5
Education		
Some College	21	11.2
Bachelor's Degree	20	10.6

Some Graduate Study	75	39.9
Graduate Degree	72	38.3
Household Income		
0-\$20,000	36	19.1
\$20,000 - \$30,000	27	14.4
\$30,000 - \$40,000	23	12.2
\$40,000 - \$50,000	25	13.3
\$50,000 - \$75,000	31	16.5
\$75,000 – above	46	24.5
Race/Ethnicity		
African American	45	23.9
Asian	2	1.1
Multiracial	7	3.7
Caucasian	126	67.0
Latino	8	4.3

Table 2*Descriptive Statistics*

Variables	Mean	Standard Deviation	N
Depression	18.55	7.17	188
Childhood Trauma	62.19	10.85	188
Resilience	39.25	5.56	188

Test of Assumptions

A hierarchical multiple regression was run to predict recent experiences of depression from gender, education, income, race/ethnicity, age, resilience, and childhood trauma. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.776. The homoscedasticity was assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than .01. There were no studentized deleted residuals greater than ± 3 standard

deviations, no leverage values less than 0.2, and values for Cook's distance above 1.

There assumption of normality was met, as assessed by Q-Q Plot.

Research Question One

The first research question was the following: What are the relationships between gender, age, income level, education, ethnicity, childhood trauma and experiencing depression and/or resilience in adulthood? Participants were asked to complete the Childhood Trauma Questionnaire, Connor-Davidson Resilience scale, and PROMIS Depression survey. The strength associations for the coefficient values are as follows: $.1 < r < .3$ is a small correlation, $.03 < r < .5$ is a medium/moderate correlation, and $r > .5$ is a large/strong association (Myers, Well, & Lorch, 2010). The Pearson value is used to measure the linear relationship between two values. The Pearson correlation created from the analysis (Table 3) identified significant but small relationships among several of the variables.

In relation to childhood trauma, several small correlations were identified. There was a small positive correlation between childhood trauma and depression, $r = .203$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and symptoms of recent experiences of depression. There was a small positive correlation between childhood trauma and age, $r = .157$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and age, meaning participants who were reported higher ages also reported higher exposure to childhood trauma. This positive correlation supports those who are older in age are more likely to have experienced childhood trauma. There was a small positive correlation between childhood trauma and education, $r = .105$. More specifically, this correlation was

for participants who have some college experience or earned a bachelor degree. This correlation suggests there is a positive linear relationship between experiences of childhood trauma with individuals with some college experience or undergraduate degrees. No correlation was found between childhood trauma and those in graduate school or who earned graduate degrees. There was a negative correlation between childhood trauma and ethnicity, $r = -.130$. More specifically, this correlation suggests there is a negative linear relationship between experiences of childhood trauma with individuals who identify as “White”. There was a small positive correlation between childhood trauma and income, $r = .141$. More specifically, those who had a household income of 30k-40k per year had a small positive correlation to childhood trauma. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and those who had a household income of 30k-40k annually. No correlations were found in other income classifications. There was a small positive correlation between childhood trauma and resilience, $r = .112$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and experiencing resilience. There was no significant correlation found between childhood trauma and gender. No moderate or strong correlations were found between any of the variables and childhood trauma.

With regards to recent experiences of depression, several correlations were found ranging in size from small to moderate. There was a moderate negative correlation between depression and resilience, $r = -.355$. This correlation suggests there is a negative linear relationship between depression and resilience, meaning recent experiences of depression and resilience have an inverse effect on one another. There was a small

positive correlation between depression and ethnicity, $r = .189$. More specifically, this correlation suggests that there is a positive linear relationship between recent experiences of depression and individuals who identify as “White”. There was a small positive correlation between depression and trauma, $r = .203$. This correlation suggests there is a positive linear relationship between recent experiences of depression and experiencing trauma. There was a small negative correlation between depression and education, $r = -.148$. More specifically, this correlation suggests there is a negative linear relationship between recent experiences of depression with individuals with some graduate school experience or graduate degrees. No correlation was found between recent experiences of depression and those with some undergraduate experience or who earned bachelor degrees. Two correlations were found between recent experiences of depression and income. There was a small negative correlation between depression and those who had a household income of 75k or more per year, $r = -.173$. This correlation suggests there is a negative linear relationship between recent experiences of depression and those who had a household income of 75k or more annually. There was a positive small correlation between depression and those who had a household income of 20-30k annually. This correlation suggests there is a positive linear relationship between recent experiences of depression and those who had a household income of 20-30k annually. There was no significant correlation found between recent experiences of depression and gender, $r = .014$. There was no significant correlation found between recent experiences of depression and age, $r = -.010$. No strong correlations were found between any of the variables and recent experiences of depression.

With regards to resilience, several correlations were found, ranging from small to moderate. There was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This correlation suggests there is a negative linear relationship between resilience and depression, meaning resilience and recent experiences of depression have an inverse effect on one another. There was a small positive correlation between resilience and gender (female), $r = .174$. More specifically, this correlation suggests there is a positive linear relationship between resilience and being a female. There was a small positive correlation between resilience and trauma, $r = .112$. This correlation suggests there is a positive linear relationship between resilience and experiencing trauma. There were two correlations between resilience and income. There was a small positive correlation between resilience and those who had a household income of 75k or more annually, $r = .127$. This correlation suggests there is a positive linear relationship between resilience and those who had a household income of 75k or more annually. There was a small negative correlation between resilience and those who had a household income of 20k-30k annually, $r = -.124$. This correlation suggests there is a negative linear relationship between resilience and those who have a household income of 20-30k annually. There was no correlation found between resilience and education, $r = -.017$. There was no correlation found between resilience and ethnicity, $r = -.092$. There was no correlation found between resilience and age, $r = .082$.

In summary, several correlations were identified according to the Pearson correlation. Pearson correlation was used to identify the strength of the linear relationships between childhood trauma, recent experiences of depression, resilience, income, age, ethnicity, education, and gender. The strongest relationship identified was a

moderate negative correlation between resilience and recent experiences of depression. This negative correlations suggests when resilience increases, recent experiences of depression decreases, the variables have an inverse effect on one another. Several small positive correlations were associated with trauma to include: age, resilience, income (30k-40k annually), education (undergraduate school), and recent experiences of depression. Several small positive correlations were associated with recent experiences of depression to include: ethnicity (White), income (20k-30k annually), and trauma. Several small positive correlations were associated with resilience to include: gender (female), income (75k or more annually), and trauma. These positive correlations suggest when one variable increases the associated variable also increases. Several small negative correlations were associated with recent experiences of depression to include: education (graduate school), and income (75k or more annually). Income (20-30k) was the only small negative correlation was associated to resilience. With regard to recent experiences of depression, based off the data analyzed, we reject the null hypothesis, because a majority of the variables had a significant relationship. With regard to trauma, we reject the null hypothesis, because majority of the variables had significant relationships. With regard to resilience, we reject the null hypothesis, because majority of the variables had significant relationships.

Table 3

Pearson Correlation

	Depression	Trauma	Resilience
Depression	1.000	.203	-.355
Gender	.014	.007	.174
Education (undergrad)	.091	.105	-.017
Education (grad)	-.148	.071	.095
Income (20-30k)	.128	.061	-.124

Income (30-40k)	.077	.141	-.037
Income (40-50k)	.049	.050	.022
Income (50-75k)	-.060	-.067	.054
Income (75k +)	-.173	-.041	.127
Ethnicity	.189	-.130	-.092
Age	-.010	.157	.082
Trauma	.203	1.000	.112
Resilience	-.355	.112	1.000

Research Question Two

The second research question was the following: controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? The researcher controlled for demographic variables as the researcher wanted to examine how much variation in the dependent variable can be explained by the addition of one or more independent variables. To control for variables, the demographic variable were analyzed prior to including the independent variables in the analysis.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Controlling for demographic variables and including childhood trauma in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. There was a small positive correlation between experiencing childhood trauma and recent experiences of depression, $r = .203$. The research hypothesis states that adults who have experienced trauma in childhood would have significantly higher rates of depression in adulthood than adults who have not experienced trauma. According to the data analysis, the null hypothesis is rejected, indicating adults who have experienced trauma in

childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma.

Research Question Three

The third and final research question was the following: controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of recent experiences of depression? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. As mentioned previously resilience was included in two separate analyses in the prediction of recent experiences of depression. In the first analysis, controlling for demographic variables and the inclusion of resilience in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .098, and a statistically significant prediction of depression $F(1, 176) = 21.386, p < .01$. In the second analysis the researcher controlled for both demographic variables and childhood trauma, and included resilience in the prediction of recent experiences of depression which led to a statistically significant increase in an R^2 of .115, and a statistically significant prediction of depression $F(1, 175) = 26.839, p < .01$. The prediction of recent experiences of depression increased significantly after controlling for childhood trauma and including resilience into the model. After including resilience in the analysis and controlling for demographic variables and childhood trauma R^2 increased from .038 to .115. Also the significance of the prediction increased from .006 to .000. According to the Pearson Correlation matrix there was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This

correlation indicates resilience and depression have an inverse relationship. The research hypothesis stated resilience would moderate depressive symptoms in adults who have experienced trauma as children. According to the data analysis, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children.

Depicted in Table 4 are four multiple regression models. Model A consisted of demographic variables (gender, education, income, race/ethnicity, and age), resilience, and childhood trauma in the prediction of recent experiences of depression. Model A was not hierarchical and did not control for any variables. Model B controlled for the mentioned demographic variables but included the addition of childhood trauma to the prediction of recent experiences of depression. Model C model controlled for the mentioned demographic variables, but included resilience to the prediction of recent experiences of depression. The Model D controlled for both mentioned demographic variables and childhood trauma and included resilience in the prediction of recent experiences of depression.

Table 4

Model Summary

	Model A	Model B	Model C	Model D
R	.501	.369	.443	.501
R Square	.251	.136	.196	.251
Adjusted R Square	.199	.82	.146	.199
St. Error of the Estimate	6.41697	6.87190	6.62827	6.41697
R Square Change	N/A	.038	.098	.115
F Change	4.882	7.369	21.386	26.839
df.1	12	1	1	1
df2	175	176	176	175
Sig. F Change	.000	.006	.000	.000

Summary

In closing, a multiple regression was used to analyze the collected data and answer each research question. Results from research question one indicated several correlations. The strongest relationship identified was a moderate negative correlation between resilience and recent experiences of depression. Several small positive correlations were associated with trauma to include: age, resilience, income (30k-40k annually), education (undergraduate school), and recent experiences of depression. Several small positive correlations were associated with recent experiences of depression to include: ethnicity (White), income (20k-30k annually), and trauma. Several small positive correlations were associated with resilience to include: gender (female), income (75k or more annually), and trauma. Several small negative correlations were associated with recent experiences of depression to include: education (graduate school), and income (75k or more annually). With regard to relationships associated with recent experiences of depression, we reject the null hypothesis, because a majority of the variables had a significant relationship. With regard to relationships associated with trauma, we reject the null hypothesis, because majority of the variables had significant relationships. With regard to relationships associated with resilience we reject the null hypothesis, because majority of the variables had significant relationships. According to the data analysis for research questions two, the null hypothesis is rejected, indicating adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. The prediction of recent experiences of depression increased significantly after controlling for childhood trauma and including resilience into the model. After including resilience in the analysis

and controlling for demographic variables and childhood trauma R^2 increased from .038 to .115. Also the significance of the prediction increased from .006 to .000, indicated resilience is a stronger predictor of recent experiences of depression than childhood trauma. According to the Pearson Correlation matrix there was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This correlation indicates resilience and depression have an inverse relationship. According to the data analysis for research question three, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children.

CHAPTER FIVE

DISCUSSION

The relationships between childhood trauma, recent experiences of depression, and resilience were examined in this study because literature supports a strong association between depression and childhood trauma. However, limited research has been conducted to examine the role of resilience in trauma survivors (Wingo et al., 2010). Investigating the role of resilience in trauma survivors can provide mental health providers with insights into effective treatment for trauma survivors (Howell & Miller-Graff, 2014). The results from this study indicate that resilience does moderate depressive symptoms in adults who have experienced trauma as children. As mental health professionals, we can increase the resilience of patients who have previously experienced trauma (Davydov, Stewart, Ritchie, & Chaudieu, 2010). Mental health treatment focused on building resilience can enhance protective processes (e.g., resources, competencies, talents and skills) that reside within the individual, within the family or peer network, and within the community (Rutter, 1987b). Focusing on resilience allows mental health practitioners to provide effective solution focused treatment (Luthar & Cicchetti, 2000). Resilience in mental health treatment focuses on: acceptance, hope, determination to change, accountability, active coping, social support, self-knowledge, and increased well-being (Havas et al., 2016).

The researcher collected online responses using SurveyMonkey. A total of 188 were determined to be complete and valid. The data collected from the study was analyzed using hierarchical multiple regression. A demographic questionnaire was used to collect information. The questionnaire included the following; (1) gender, (2) total

household income and number in household, (3) highest level of education obtained, (4) ethnicity, and (5) age.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. With regard to relationships associated with recent experiences of depression, we reject the null hypothesis, because a majority of the variables had a significant relationship. With regard to relationships associated with trauma, we reject the null hypothesis, because majority of the variables had significant relationships. With regard to relationships associated with resilience we reject the null hypothesis, because majority of the variables had significant relationships. According to the data analysis for research questions two, the null hypothesis is rejected, indicating adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. According to the data analysis for research question three, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children. This chapter will discuss the results, limitations and implications of this study.

Findings from Descriptive Data

The purpose of this study is to examine the relationship between childhood trauma, recent experiences of depression, and resilience. The instruments used for this study were the CTQ, PROMIS Depression short form, and CD-RISC. Based on the data collected in this study the minimum score on the CD-RISC was 19, the maximum score was 50. The mean of the CD-RISC was 39.25 and the standard deviation was 5.56.

Participants in this study scored higher than the means of the CD-RISC which is report to be 32.1 with a standard deviation of 5.8 (Davidson & Connor, 2015). Based on the data collected in this study the minimum score on the CTQ was 45, the maximum score was 101. The means for the CTQ was 62.19 and the standard deviation was 10.85. The mean scores to validate the CTQ for men and women were 53.4 (Bernstein & Fink, 1998). The data collected from this study is with in normal limits of valid scores on the CTQ. The data also indicated the minimum score on the PROMIS scale was 8, and the maximum score was 40. The mean was 18.55 with a standard deviation of 7.17. No information about the PROMIS average descriptive statistics are provided in the user manual. The total number of eligible participants was $N=188$. The most frequently chosen demographic group of respondents were female (88.8%, $n=167$), Caucasian (67.0%, $n=126$), who had a household income of \$75,000 and above (24.5%, $n=46$), completed some graduate study (39.9%, $n=75$), and age 24 (7.4%, $n=14$). Male and Transgender individuals combined to represent 11.1%, $n=21$ of participants. The second largest income group represented was individuals who had a household income 0-\$20,000 annually (19.1%, $n=36$). The least represented income group was individuals who had a household income of \$30,000 - \$40,000 (12.2%, $n=23$). The second largest ethnic group represented was African Americans (23.9%, $n=45$). The least represented ethnic group was Asian Americans, who represented 1.1%, $n=2$.

Research Question One

Research question one sought to examine the relationships between gender, income level, education, ethnicity, depression, resilience, and childhood trauma. To analyze significance of relationships the researcher reviewed the Pearson correlations.

The strongest relationship identified was a moderate negative correlation between resilience and recent experiences of depression, which supports current literature, those that higher levels of resilience are associated with fewer negative life outcomes, such as depression (Spilman, Smith, Schirmer, & Tonui, 2015).

Several small positive correlations were associated with trauma including age, resilience, income (30k-40k annually), education (undergraduate school), and recent experiences of depression. The positive correlation between recent experiences of depression and trauma is congruent with current literature which states trauma survivors are more likely to experience symptoms of recent experiences of depression than individuals who have not experienced trauma (Nakia et al., 2015). The correlation between age and trauma suggests there is a positive linear relationship between experiences of childhood trauma and age. Meaning participants who were older reported higher exposure to childhood trauma. This positive correlation supports those who are older in age were more likely to experience childhood trauma. Trends in child discipline may be contributing to this positive correlation as parents were more aggressive when disciplining their children in the 50's, 60's and 70's. Many things we presently consider to be child abuse were normal practice in disciplining children (switches, belts, and beatings). On Jan. 31, 1974, the Child Abuse Prevention and Treatment Act was passed, the purpose of the act was to prevent, identify, and treat child abuse and neglect (Stein, 1984). This act shifted culture of discipline in our nation.

The positive correlation between resilience and trauma supports the notion that those who experience traumatic events are more resilient. These finding are in contrast to Simeon et al., (2007) who found childhood trauma and resilience had a moderate inverse

relationship ($r = -.43$). These contradictory findings are likely based on the measures administered and variables examined in the study. Simeon et al., administered the Defense Style Questionnaire, the Relationship Questionnaire, the Childhood Trauma Questionnaire, and the Tridimensional Personality Questionnaire. Also, the participants in this study have successfully made it to college, therefore the resilience levels in participants of this study may be elevated compared to the general population. These contradictory findings support Alvord and Grados (2005), who suggested that continued research is needed to understand the role resilience has in survivors of childhood trauma. Research is limited focusing on resiliency after experiencing trauma, current research has been unable to determine the distinction between resilient individuals and a gradual recovery from trauma (Bonanno, 2004). In fact, a growing number of studies have shown individuals exhibit fewer psychological symptoms as time passes from the traumatic event (Bonanno, Moskowitz, Papa, & Folkman, 2005). The increase of resilience after experiencing a traumatic event could be related to individuals seeking mental health services, support, or psychological growth, and there is a need for more systemic research to determine the source of resilience (Bonanno, Galea, Bucciarelli, & Vlahov, 2006).

The positive correlation between trauma and a reported household income of 30k-40k, supports the Lowe et al., 2015 findings, which indicated that those who live in low income neighborhoods with high crime rates are more likely to experience trauma. No correlation was found between trauma and those who reported a total household income of 20k-30k, which was the lowest income category in this study, these findings are in contrast to previous studies which found trauma to be associated with individuals with low income (Cross, Crow, Powers, & Bradley, 2015). No correlation was associated

between trauma and reported incomes of 40k-50k, 50k-75k, and 75k and above. These lack of correlations support the two previously mentioned studies supporting the association between lower incomes and experiencing trauma.

No correlation between gender and childhood trauma was supported. This does not support previous research, which indicates females are more likely to experience childhood trauma, specifically sexual abuse (Messina & Grella, 2006; Levitan et al., 1998). No correlation between gender and trauma could be impacted by men denying experiencing sexual abuse, a previous study found men are less likely to report/disclose being sexually abused, because they fear being viewed as homosexuals or victims (Romona 2005).

The negative correlation found between “Whites” and trauma is in contrast to Perez Benitez et al., (2010) findings which found Whites are more likely to experience childhood trauma, specifically neglect and emotional abuse. This contrast in finding is likely due to the type of trauma reported by the CTQ. Perez Benitez et al., (2010), also found that African Americans and Latinos had higher rates of witnessing trauma, specifically seeing someone severely injured or killed.

Several small positive correlations were associated with recent experiences of depression to include: ethnicity (White), income (20k-30k annually), and trauma. The positive correlation between recent experiences of depression and ethnicity (White) is supported by other findings such as Riolo, Nguyen, Greden, and King (2005), who found major depressive disorder was significantly higher in Caucasians than in other cultures. Several small negative correlations were associated with recent experiences of depression

to include: ethnicity (White), education (graduate school), and income (75k or more annually).

Two categories of income were associated with recent experiences of depression there was a positive correlation between recent experiences of depression and a reported total household income of 20k-30k, and a negative correlation between recent experiences of depression and a reported total household income of 75k or more. No correlations were found between recent experiences of depression and a reported household income of 30-40k, 40-50k, or 50-75k. The positive correlation between depression and lower income (20k-30k) supports Zimmerman and Katon (2005), who argued that experiences and persistence of depression are higher among persons with low incomes. Zimmerman and Katon (2005) findings also support the negative correlation between recent experiences of depression and a reported household income of 75k or more.

Several small positive correlations were associated with resilience to include: gender (female), income (75k or more annually), and trauma. The negative correlation between recent experiences of depression and higher levels of income (75k or more) income also supports Zimmerman and Katon, (2005). The study found that Whites had a positive correlation to recent experiences of depression but a negative correlation to trauma, with no significant correlation to resilience. These finding are contradictory to other findings in this study and other literature, which supports a positive correlations between both depression and trauma (Kendler, Gardner, & Prescott, 2002; Brewin, Andrews, & Valentine, 2000; Kessler et al., 2010; Collishaw, Pickes, Messer, Rutter, Shearer, & Maughan, 2007). The inverse relationship between Whites and trauma could

be due to a limitation in the CTQ scale which only captures trauma in five categories to include: physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect. The scale does not capture witnessed trauma, and it is supported that other ethnicities are more likely to witness severe traumatic experiences than Whites (Perez Benitez et al., 2010).

Research Question Two

The second research question was the following: controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Controlling for demographic variables and including childhood trauma in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. The results suggest childhood trauma is a strong predictor of recent experiences of depression, as it is significant $<.01$. There was also a small positive correlation between experiencing childhood trauma and recent experiences of depression, $r = .203$. This correlation supports a study conducted by Carr, Martins, Stingel, Lemgruber, & Juruena (2013), which indicated those who experienced trauma have a stronger association with recent experiences of depression than any other mental health disorder. The research hypothesis states that adults who have experienced trauma in childhood would have significantly higher rates of recent experiences of depression in adulthood than adults who have not experienced trauma. According to the data analysis, the null hypothesis is rejected,

indicating adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. This data supports existing literature, experiencing childhood trauma increases the likelihood of experiencing depression in adulthood (Kendler, Gardner, & Prescott, 2002; Brewin, Andrews, & Valentine, 2000; Kessler et al., 2010; Collishaw, Pickes, Messer, Rutter, Shearer, & Maughan, 2007).

Research Question Three

The third and final research question was the following: controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. As mentioned previously, resilience was included in two separate analyses in the prediction of recent experiences of depression. In the first analysis, controlling for demographic variables and the inclusion of resilience in the prediction of depression led to a statistically significant increase in an R^2 of .098, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 21.386, p < .01$. In the second analysis, the researcher controlled for both demographic variables and childhood trauma, and included resilience in the prediction of recent experiences of depression which led to a statistically significant increase in an R^2 of .115, and a statistically significant prediction of recent experiences of depression $F(1, 175) = 26.839, p < .01$. The prediction of recent experiences of depression increased significantly after controlling for childhood trauma and including resilience into the model. After including

resilience in the analysis and controlling for demographic variables and childhood trauma R^2 increased from .038 to .115. Also the significance of the prediction increased from .006 to .000. According to the Pearson Correlation matrix there was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This negative correlation is consistent with other literature, as resilience has been credited with working as a buffer between trauma and depression (Luthar & Cicchetti, 2000; Jopp & Rott 2006; Andreescu et al., 2007). The research hypothesis stated resilience would moderate depressive symptoms in adults who have experienced trauma as children. According to the data analysis, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children. The results of this study support Wingo et al., 2010 study in which indicated trauma exposure contributed to depressive symptoms severity while resilience moderated symptoms of recent experiences of depression.

Limitations of the Research Study

There were numerous limitations in this study. The most represented groups of participants were Caucasian females who reported a household income of at least \$75,000 and completed some form of graduate study. These demographic factors pose a threat to external validity, because the most represented groups in this study are not generalizable to the majority of university student population. Also, many of the participants were counseling, human services, and psychology majors, which proposes a limitation to the generalization of the university student population. All data was gathered through self-report, the results may have been affected by any participants' decision to respond in an untruthful manner, and individuals from different circumstances and

identities may differ in their conceptualization of trauma. For example, individuals who live in environments with high crime and who frequently witness violence are likely to be desensitized to violence (Gaylord-Harden, Cunningham & Zelencik, 2011). It is likely that individuals in this study from various backgrounds conceptualize their past experiences related to trauma differently.

The data collected relied on information to be gathered retrospectively, which provides limitations to accuracy of data, and participants' ability to recall previous events. The instruments used are based on specific DSM 5 criteria, created to diagnose mental health based on American standards, therefore cultural encapsulation is a limitation of the study. The CTQ has low alpha scores on the physical neglect subscale, enhancing the odds that the observed result is due to chance. In addition, it also only measures trauma based upon "childhood maltreatment" and may omit experiences of other sources of childhood trauma. The number of members in each household was not included in the analysis of household income. Similar to other studies that researched similar variables, this presents a limitation as it is not an accurate representation of individual income, and the socioeconomic status of individuals living with multiple members in a household with higher reported incomes are misrepresented (Wingo et al., 2010; Coates, Phares, & Dedrick 2013). The PROMIS depression survey inquires only about the last 7 days, which may not accurately represent experiences of depression for participants. This research did not offer participants an avenue to respond freely (e.g., interview, written response).

This study also did not offer alternative methods to complete the survey, interpretation of questions depended on the participant's reading comprehension. Only

electronic surveys were used in this study, which proposes a threat to sampling, respondent availability, potentially increased confusion (no one physical present to directly answer questions), and possible survey fraud. All participants in this study are volunteers and a convenience sample was used. Both of these factors pose threats to external validity because research has revealed that volunteers do not have the same characteristics as the general population (Rosenthal & Rosnow, 1976). In this study, a large population of university students were accessed, however the study received a very small response rate. A small response rate is a limitation because of non-response bias. This sample may not accurately represent of the student body from the universities contacted. All participants were recruited through online request to academic departments, the researcher is unable to determine how many potential participants were introduced to the survey.

Implications for Practice

Mental health professionals may find the results of this study to have beneficial implications. Previous studies have researched the associations between resilience and depression (Beardslee & Podorefsky, 1988; Bisschop, Kriegsman, Beekman, & Deeg, 2004; Davydov et al., 2010; Diehl & Hay, 2013). However research is limited regarding the relationship between resilience and depression after the experience of a traumatic event (Min et al., 2013; Rutten et al., 2013; Southwick & Charney, 2012). Understanding the role of resilience in trauma survivors provides mental health providers with greater insight allow them to adjust treatment to more effectively treat trauma survivors (Howell & Miller-Graff, 2014). Resilience in mental health treatment focuses on: acceptance,

hope, determination to change, accountability, active coping, social support, self-knowledge, and increased well-being (Havas, et al., 2016).

Pereria, Barkham, Kellett, and Saxon (2016), found significantly improvement in patient outcomes with depressed clients who were treated by practitioners who combined resilience with mindfulness. Mindfulness is a process of focusing one's attention on what is occurring in the present moment and being able to accept these occurrences or experiences in a nonjudgmental manner (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). An effective combination of both mindfulness and resilience can be achieved through treatment that is guided by the present moment, strength based techniques, and personalized therapeutic rapport (Pereria, Barkham, Kellett, & Saxon, 2016).

It is well established that individuals who experience trauma are more likely to experience depression (Spilman, Smith, Schirmer, & Tonui, 2015; Norman et al., 2012; Nakia et al., 2015). Yet resilience in trauma survivors has not been thoroughly explored and continued research was needed (Loh, Schutte, & Thorsteinsson, 2014). This study fills a gap in current literature by investigating the relationships between trauma survivors, depression, and resilience. The results from this study indicate that resilience does moderate depressive symptoms in adults who have experienced trauma as children. As mental health professionals, this information can be used to improve treatment to increase the resilience of patients who have previously experienced trauma. Overcoming obstacles can be difficult, however, resilience is the process that helps people adapt in the face of adversity. The premise of resilience is about overcoming an obstacle, and moving past negative situations. As mental health professionals we can foster resilience in our

clients through modeling, goal setting, homework, positive reinforcement, and affirming a client's progress.

Trauma is an event that can happen at any place, anytime, to anyone. In the helping professions, we are trained to be reactive when treating those effected by trauma, essentially waiting for a client to seek services after experiencing negative symptoms associated with trauma (depression, anxiety, sleep disturbances). Our primary duty as counselors is to assist those we serve. As mental health professionals, if we continue to be reactive in treating these ailments, we are doing our clients and communities a disservice. We must take a proactive approach and impact our community at the macro level. To impact our communities at the macro level we must identify the problems in the communities and assist those community members to make a change. Lobbying for issues that affect the community, and promoting change for safer neighborhoods, improved education, more jobs, and other initiatives which enhance positive resources and decrease community threats.

Proactively fostering resilience and empowering our clients and communities will continuously assist those who we serve. Proactively fostering resilience will help our clients more effectively manage stress, cope with adjustments, and reduce psychological symptoms associated with trauma. As mental health professionals we can proactively nurture resilience in our communities by creating positive support networks, increasing community involvement, help our communities set goals, advocate for our communities, celebrate community achievements, and foster community pride. As counselors we can advocate for our communities not only through lobbying but we can also advocate through mental health. We can provide mental health services to those in the

communities for example: teen support groups, addiction groups, parenting seminars, career counseling, and family counseling.

As a mental health advocates, we should be striving to promote a positive change in the communities. Resilience can be proactively nurtured in the schools, places of worship, and in the work place with some of the same methods. The key is to create a positive community environment, set goals, celebrate achievements, and increase involvement. Considerable research has indicated individuals in lower socioeconomic status (SES) report more emotional distress than their higher SES counterparts (McLeod & Kessler, 1990). Individuals living in lower SES communities are at higher risk of emotional distress and have fewer resources to promote resilience compared to communities with higher socioeconomic status (Gallo, Borgart, Vranceanu & Matthews, 2005). All communities need additional resources to promote resilience, however, additional resources in communities with lower SES will assist in proportionality promoting resilience in all communities.

The effects of trauma can be devastating and long lasting. Due to the prevalence of trauma experienced in our communities it is likely that mental health professionals will work with clients who are battling issues related to trauma. It is important that helping professionals are equipped with the skills and resources to handle trauma related issues. Trauma informed care encompasses the understanding of the neurological, biological, psychological, and social effects of trauma (Hopper, Bassuk, & Olivet, 2010). A trauma informed counseling approach utilizes six key principles: safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, and cultural, historical, and gender issues (Substance Abuse and Mental Health Services

Administration, 2014). These key principles can be applied in multiple settings (groups, individual, family). Staff training, consultation, continued education, and supervision are all important aspects of systemic change to incorporate trauma informed care (Hopper, Bassuk, and Olivet, 2010).

Counselor educators may find the results of this study to have beneficial implications. Resiliency is an important construct for understanding why some people do not develop psychological and behavioral problems after experiencing adversity or traumatic events (Luthar, Cicchetti, & Becker, 2000). Educating counselors on the construct of resilience in mental health treatment is vital to promote safety and change among survivors of trauma, including strength based treatment and interventions (Yuan, 2015). Education about resilience can be employed through professional presentations, in the classroom, and throughout supervision. Resilience can also be fostered in the classroom through creating a positive education environment, assisting students set and accomplish goals, celebrate academic achievement, and empowering students to foster positive relationships.

Research related to resilience and trauma is scarce, these findings expand on current research related to resilience and experienced trauma. Based on the data derived from this study, it is proven resilience does moderate depressive symptoms in adults who have experienced trauma as children. The results of this study support the Wingo et al., 2010 study in which indicated trauma exposure contributed to depressive symptoms severity while resilience moderated it. In other literature, resilience has been credited with working as a buffer between trauma and depression (Luthar & Cicchetti, 2000; Jopp & Rott 2006; Andreescu et al., 2007).

Continued Research

To expand on these findings, future studies could focus on additional variables associated with childhood trauma such as hope, substance use, and other mental health disorders. Studies should also identify a population outside of university students. The most frequently chosen demographic groups of participants in this study were Caucasian females who completed at least some graduate form of education., Future studies should identify a more diverse population of participants. In this study, a large population of university students were accessed, however the study received a very small response rate. All participants were recruited through online request to academic departments, the researcher is unable to determine how many potential participants were introduced to the survey. This research did not offer participants an avenue to respond freely (e.g., interview, written response). Future studies should analyze data with both qualitative and quantitative data research methods allowing the participants to have their individual voice in the data. The benefit of incorporating qualitative data will allow the participants to have a voice regarding their experiences of trauma, recent experiences of depression, and factors that influence resilience. The data collected relied on information to be gathered retrospectively, future studies should consider using instruments or interviews that focus on information to be gathered from more recent experiences. Allowing the participants to respond to symptoms of the present day could provide the researcher with prospective data as opposed to retrospective data. Only electronic surveys were used in this study, future studies should consider in person surveys and/or in person interviews.

As mentioned previously several factors contribute to the variance in reactions after experiencing a traumatic event, one factor is a post-traumatic growth. Post-traumatic

growth is the experience of positive change that occurs as a result of the struggle with highly challenging life crises' (Tedeschi & Calhoun, 2004). The concept of post-traumatic growth is in the early stages of investigation therefore research is limited (Li, Cao, Cao, & Liu, 2015). Post-traumatic growth may result in individuals displaying higher levels of self-efficacy, increased spirituality, greater appreciation for life, or identify a more fulfilling path for the future (Sheikh, 2008). Both resilience and post-traumatic growth are constructs that result in positive adaption after a traumatic event. Li, Cao, Cao, & Liu (2015), found those who have high levels of resilience are less likely to experience post-traumatic growth. This is attributed to people with higher level of resilience not experiencing psychological seismic, which is necessary for a person to experience post-traumatic growth (Li, Cao, Cao, & Liu, 2015). Post-traumatic growth is an emerging area of research related to the positive psychological changes that occur after experiencing trauma, and continued research is need to understand the relationship between post-traumatic growth and resilience.

Upon examination of literature, there is a large gap in scholarly research focused on the impacts of resilience in relation to survivors of childhood trauma (Wingo et al., 2010). Continued research on resilience can be used to improve the effectiveness of treatment with patients who have experienced trauma, and to compare outcomes in treatment with clinicians who focus on increasing resilience in clients versus those who don't. This study contributed to the limited literature in the mental health field regarding the relationships between trauma, recent experiences of depression, and resilience, and hopefully will stimulate additional research studies on this topic.

Summary

Although experiences of trauma are common, reactions vary due to the variety of bio-psychosocial and cultural factors that influence the individual reaction to the trauma (Nakai et al., 2015). This is attributed in part to resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). Resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thorsteinsson, 2014). This study used a hierarchical multiple regression to examine the relationships between childhood trauma, recent experiences of depression, and resilience in adult university students.

The results of this study suggest resilience does moderate depressive symptoms in adults who have experienced trauma as children. The study also determined that adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. The study identified significant but small relationships among several of the variables, including: childhood trauma and ethnicity, childhood trauma and age, childhood trauma and income, childhood trauma and education, childhood trauma and resilience, childhood trauma and recent experiences of depression, recent experiences of depression and ethnicity, recent experiences of depression and education, recent experiences of depression and income, resilience and gender, resilience and income, and resilience and trauma.

As mental health professionals we can proactively nurture resilience in our communities by creating positive support networks, increasing community involvement, help our communities set goals, advocate for our communities, celebrate community achievements, and foster community pride. As counselors we can advocate for our communities not only through lobbying but we can also advocate for comprehensive

mental health services, both treatment and prevention. We can provide mental health services to those in the communities for example: teen support groups, addiction groups, parenting seminars, career counseling, and family counseling. As a mental health advocates, we should be striving to promote a positive change in the communities. Resilience can be proactively nurtured in the schools, places of worship, and in the work place with some of the same methods. The key is to create a positive community environment, set goals, celebrate achievements, and increase involvement. Future studies related to trauma, resilience, and depression can be used to improve the treatment of patients who have experienced trauma.

CHAPTER SIX
MANUSCRIPT

EXPLORING THE RELATIONSHIP BETWEEN DEPRESSION AND RESILIENCE
IN SURVIVORS OF CHILDHOOD TRAUMA

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ABSTRACT

Although experiences of trauma are common, reactions vary due to a host of biopsychosocial and cultural factors that influence the individual reaction to the trauma (Nakai et al., 2015). One such factor is resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). This study used hierarchical multiple regression to examine the relationships between childhood trauma, recent experiences of depression, and resilience in adult university students. This study also examined the possible moderating effects on depression by resilience. Participants completed the Childhood Trauma Questionnaire, Connor-Davidson Resilience scale, and PROMIS Depression survey. Small significant relationships were found for several of the variables, including: childhood trauma and ethnicity, childhood trauma and age, childhood trauma and income, childhood trauma and education, childhood trauma and resilience, childhood trauma and depression, depression and ethnicity, depression and education, depression and income, resilience and gender, resilience and income, and resilience and trauma. The results of this study also suggest resilience has a moderate inverse relationship with depression. The data also confirmed the existing literature which noted that adults who have experienced trauma in childhood have significantly higher rates of depression in adulthood than adults who have not experienced trauma.

Keywords: childhood trauma, resilience, depression

INTRODUCTION

Trauma was once considered an abnormal experience, however, the first National Comorbidity Study established how prevalent trauma is in the United States (Substance Abuse and Mental Health Services Administration, 2014; Kessler et al., 1999). The study found 61 percent of men and 51 percent of women experienced at least one trauma in their lifetime (Kessler et al., 1999). While both adults and young people experience trauma at high rates, among young people a longitudinal general population study of youth in western North Carolina found 25 percent of youth experienced trauma within the last six months (Costello, Erkanli, Fairbank, & Angold, 2002).

Child abuse is one source of trauma. In 2008, an estimated 772,000 children were classified by CPS authorities as being maltreated and 1,740 children died from abuse and neglect (Center for Disease Control, 2014). The lifetime cost of mental and physical health treatment for each survivor of child abuse is approximately \$210,012, which is comparable to costly health conditions such as stroke and type 2 diabetes (CDC, 2014). Individuals who experience childhood abuse are also more likely to develop major depression, mental health disorders, and other medical problems in their lifetime than those who do not experience abuse (SAMHSA, 2014; MacMillan et al., 2001).

The effects of trauma place heavy burdens on communities at large. From 2004 through 2009, the Department of Veteran Affairs spent \$2.2 billion treating patients with trauma related mental health disorders (United States Congressional Budget Office, 2012). Trauma survivors are four times more likely to experience symptoms of depression and other severe mental health issues than individuals who have not experienced trauma (Nakia et al., 2015). In fact, experiencing trauma during childhood is

linked with an increase in psychopathology in adults (Spilman, Smith, Schirmer, & Tonui, 2015). Several studies have also researched the associations between resilience and depression, however, research is limited investigating the relationship between resilience and depression in survivors of trauma (Davydov, Stewart, Ritchie, & Chaudieu, 2010; Diehl & Hay, 2013; Min et al., 2013; Rutten et al., 2013; Southwick & Charney, 2012).

The impacts of childhood trauma are often lasting, including increasing the likelihood of experiencing depression in adulthood (Kessler et al., 2010). Not only depressive symptoms but other psychological, behavioral, and emotional concerns are more likely to be exhibited in those who experienced childhood trauma (Kessler et al., 2003).

Yet, those who are less resilient are more likely to develop symptoms of anxiety and depression than those who are more resilient (Hoge, Austin, & Pollack, 2007). Resiliency is an important construct for understanding why some develop psychological and behavioral problems after experiencing adversity or traumatic events and others do not (Luthar, Cicchetti, & Becker, 2000). Influences of resilience on depression following exposure to trauma are largely unknown and continued research is needed (Wingo et al., 2010).

Although experiences of trauma are common, reactions vary due to the variety of biopsychosocial and cultural factors that influence the individual reaction to the trauma (Nakai et al., 2015). For example, some trauma survivors have severe and long lasting effects, whereas others overcome the circumstances and meet challenges more readily

(SAMSHA, 2014). This is attributed in part to resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011).

Psychological resilience is determined by individual characteristics, family cohesion and support, and external support systems (Basim & Cetin, 2011). In Simeon et al.'s study conducted in 2007, childhood trauma was identified as having a strong inverse relationship with psychological resilience. While it is well established that individuals who experience trauma are likely to experience depression (Spilman, Smith, Schirmer, & Tonui, 2015; Norman et al., 2012; Nakia et al., 2015), resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thorsteinsson, 2014). It was the aim of this study to expand on current research regarding trauma survivors by examining the relationship between resilience and depression among this population.

In this study, the data was analyzed using hierarchical multiple regression, which was used to predict criterion variables based on one or more predictor variables (Kelley & Maxwell, 2010). Multiple regression analysis was selected because the goal of this study is to measure experiences of childhood trauma as a predictors of depression in adulthood. This study also aimed to explore the effects of resilience on depression. The research assessed the linear relationship between the predictor and criterion variables adjusting for the effects of the demographic variables and permitting analysis of the specific shared variance in the research variables. The researcher tested for the following statistical assumptions: variables are normally distributed, linear relationship between independent and dependent variables, variables are measured without error (reliability), and homoscedasticity. The research design consisted of both descriptive and multiple

regression analyses of the CTQ, PROMIS-Depression, and Connor-Davidson Resilience Scale. Furthermore, descriptive statistics were conducted on the demographic data to determine the means, standard deviation, ranges, and mode for the obtained data.

The significance level of this study was set to .01, increasing the power of results, and minimizing the likelihood of Type 1 error. In this study a total of eight variables were examined and the alpha level was lowered from .05 to .01 to protect the data from false positives. The confidence interval in this study was set to 99%, this researcher did not utilize a Bonferroni correction as this is typically used to adjust the P value when running multiple comparisons on one data set. Similar to several recent studies the researcher used adjusted the confidence interval to 99% without utilizing a Bonferroni correction due to the limited amount of tests ran on the data set (Ogle, Rubin, & Siegler, 2013; Linzetzky, Pregamin-Hight, Pine, & Bar-Haim, 2015; Gallais et al., 2015). Correlation and hierarchical regression analysis were employed to determine the relationships, if any, among the variables and to assess if the assumptions of the primary analysis were met. Using multiple regression analysis, this study aimed to answer the following research questions: What are the bivariate correlations among all variables? Controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? Controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression? The Childhood Trauma Questionnaire has three items comprising the Minimization/Denial scale, in the event denial or minimization is indicated, the researcher will not use any of the participant's data in the study.

SPSS 21.0 was utilized to analyze the data once all data collection procedures had been completed. The data was downloaded from SurveyMonkey and transferred to SPSS. Data was then analyzed for completeness and partially completed surveys were removed, as well as denial indicated surveys. Using SPSS frequencies functions, the demographic characteristics of survey participants were obtained, which included ethnicity, gender, household income, and current academic status.

Research Questions and Hypothesis

Research Question 1: What are the bivariate correlations among all variables?

- a. What are the relationships between gender, income level, age, education, ethnicity, childhood trauma and experiencing depression and/or resilience in adulthood?

H1: There will be significant relationships between gender, income, age, education, ethnicity, and experiencing childhood trauma, depression, or resilience.

Research Question 2: Controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood?

H2: Adults who have significantly higher rates of depression in adulthood are more likely to have experienced trauma in childhood.

Research Question 3: Controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression?

H3. Resilience will moderate depressive symptoms in adults who have experienced trauma as children.

Ethical Considerations:

In accordance with the American Counseling Association's Ethical Code (2014) and the Human Subject Board Exempt Committee of the researcher's university, precautions were used in protecting the welfare of the participants. A thorough explanation of the study's procedure was provided and informed consent was solicited from each participant. Sound instrumentation was used in an appropriate manner and was scored and interpreted by qualified individuals. The primary researcher and dissertation committee were the only individuals involved in the distribution and scoring of instruments. The primary researcher has completed doctorate level courses in applied statistics and also in advanced counseling research design. Instruments were distributed adhering to the surveys' specific instructions. Confidentiality of the participants identifying data was ensured through the use of coding on all instrumentation and data collected. Due to nature of the topics broached in the survey, the researcher provided participants with the National Suicide Hotline number, in the event they began to feel unsafe or have thoughts of wanting to harm themselves.

PARTICIPANTS

The data was collected over a six-week period in the spring of 2016. Requests for participation were distributed via email to various counseling, human services, and psychology programs across the nation. The researcher used SurveyMonkey to collect responses. Participants were accessed through a professional Counselor Education and Supervision Network listserv; through contact with faculty in a convenience sample of counseling, human services, and psychology programs; and also Facebook. CESNET was identified as a platform to gain participants because many subscribers are counseling students enrolled in college or universities. The researcher sent a general invitation to all

CESNET subscribers, this initial invitation was followed up by two reminder invitations to CESNET users. In the reminder invitations, the researcher asked for additional participants to participate in the study.

Facebook was identified as a platform to gain participants because many of the researchers' "Facebook Friends" are currently pursuing graduate education and would meet the criteria to be a participant in the survey. On Facebook, the researcher created a status with the link and brief description of the study. The researcher invited Facebook followers who were currently enrolled in a college or university to participate in the study.

In addition to social media platforms, the researcher directly emailed the head faculty of several counseling departments. In this email the researcher provided the faculty with a description of the dissertation study, detailed IRB approval information, a link to the survey, and a request that the information be distributed to individuals enrolled in their program. The researcher individually contacted 84 Universities across the nation. The researcher utilized the CACREP directory (cacrep.org/directory) to identify counseling based programs and find the counseling departments' websites. The researcher used the schools' websites to identify the email address of the head faculty of each department. Some universities had multiple counseling program concentrations. When this occurred the researcher individually contacted each program's leader. The researcher directly contacted the head faculty of 62 clinical mental health counseling programs, 15 counselor education and supervision programs, 22 community counseling programs, 3 psychology programs, and 2 human services programs. In an attempt to access more participants, the researcher distributed one follow up email requesting

continued need of participants. In the follow up email, the researcher also included all full time faculty (assistant professors, associate professors, professors, and emeritus professors), and requested the faculty distribute the information to the students enrolled in their program. Follow up emails were distributed 5 days after the initial email. A total of 253 individuals responded to the survey. Thirty-eight surveys were determined to be incomplete and 27 surveys determined to include minimizing/denying information on the CTQ. Incomplete surveys and participants who minimized on the Childhood Trauma Questionnaire were removed from the data. A total of 188 were determined to be complete and valid.

RESULTS

A total of 253 individuals responded to the survey. Thirty-eight surveys were determined to be incomplete and 27 surveys determined to include minimizing/denying information on the CTQ. Incomplete surveys and participants who minimized on the Childhood Trauma Questionnaire were removed from the data. A total of 188 were determined to be complete and valid.

Completed surveys included a demographic questionnaire in which respondents identified their gender, age, race/ethnicity, household income and number in the household, and education level (see Table 1). The demographic information revealed the most frequently chosen demographic groups were female (88.8%, $n=167$), Caucasian (67.0%, $n=126$), had a household income of \$75,000 and above (24.5%, $n=46$), completed some graduate study (39.9%, $n=75$), and age 24 (7.4%, $n=14$).

Individuals reporting and income between \$20,000-\$30,000 had a mean score of 19.52 on the PROMIS scale, a mean score of 62.88 on the CTQ Scale, and a mean score

of 38.53 on the CD RISC scale. Individuals reporting and income between \$30,000-\$40,000 had a mean score of 19.17 on the PROMIS scale, a mean score of 63.89 on the CTQ Scale, and a mean score of 39.02 on the CD RISC scale. Individuals reporting and income between \$40,000-\$50,000 had a mean score of 18.93 on the PROMIS scale, a mean score of 62.77 on the CTQ Scale, and a mean score of 39.43 on the CD RISC scale. Individuals reporting and income between \$50,000-\$75,000 had a mean score of 18.12 on the PROMIS scale, a mean score of 61.52 on the CTQ Scale, and a mean score of 39.52 on the CD RISC scale. Individuals reporting and income between \$75,000 and above had a mean score of 18.66. on the PROMIS scale, a mean score of 62.14 on the CTQ Scale, and a mean score of 39.16 on the CD RISC scale.

The researcher created dichotomous categories for each of the following variables: gender, education, and race/ethnicity. Due to low representation in each group, the researcher transitioned gender, education, and race/ethnicity into dichotomous categories. Income was more evenly represented therefore individual groups were analyzed for this variable. Income was divided into six categories: (0-\$20,000, \$20,000-\$30,000, \$40,000-\$50,000, \$50,000-\$75,000, \$75,000 and above). Also, age was not transitioned into a dichotomous category because it was a continuous variable. To create dichotomous categories for gender, the researcher examined the most chosen group in the category, which was female. The researcher examined the data and created new labels for each participant, if the participant was a female they received the code "0", if not (male, transgender) they received the code "1". To create a dichotomous variable for race/ethnicity, the researcher examined the most chosen group of the race/ethnicity, which was Caucasian. The researcher examined the data and created new labels for each

participant, if the participant was a Caucasian they received the code “0”, if not (African American, Asian, Latino, Multi-Racial) they received the code “1”. Initially there were four groups in the education category: some college, bachelor degree, some graduate study, and graduate degree. To create a dichotomous variable for education, the researcher divided the category into two groups undergraduate or graduate. The researcher examined the data and created new labels for each participant, if the participant had some graduate study or earned a graduate degree they received the code “0”, if not (some college, bachelor degree) they received the code “1”.

The researcher used a hierarchical multiple regression to control for the effects of covariates in the results and to analyze the effects of demographic and independent variables when predicting the dependent variable. The researcher controlled for demographic variables in order to examine how much variation in the dependent variable can be explained by the addition of one or more independent variables. To answer research question one, the researcher included the following variables into the analysis for the prediction of recent experiences of depression (criterion variable): gender, age, race/ethnicity, income, education, childhood trauma, and resilience. To determine bivariate relationships among variables, the researcher utilized the Pearson Correlation matrix to determine if there were significance relationships between variables. To answer research question two, the researcher included the demographic variables (gender, age, race/ethnicity, income, and education) and childhood trauma into the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables to examine the relationship between childhood trauma and recent

experiences of depression. To control for variables, the demographic variables were first analyzed without the independent variables in the analysis.

To answer research question three two analyses were utilized. The researcher first included the demographic variables along with resilience in the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables to examine the relationship between resilience and recent experiences of depression. Secondly, the researcher included the demographic variables, childhood trauma, and resilience into the analysis for the prediction of recent experiences of depression. The researcher then controlled for demographic variables and childhood trauma in order to distinguish the variation of childhood trauma when predicting for recent experiences of depression. The research also used the Pearson Correlation matrix to determine the strength of relationships between childhood trauma, resilience, and recent experiences of depression.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Using a hierarchical multiple regression analysis only including demographic variables (gender, income, education, ethnicity, and age) were initially included to predict recent experiences of depression. The results of this analysis were statistically insignificant $F(7.177) = 1.746, p > .01$. Controlling for demographic variables and the including childhood trauma into the analysis in the prediction of recent experiences of depression led to a statistically significant increase R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. Controlling for

demographic variables and including resilience into the analysis for the prediction of recent experiences of depression led to a statistically significant increase R^2 of .098, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 21.386$, $p < .01$. Finally, controlling for demographic variables and childhood trauma, and including resilience in the prediction of recent experiences of depression led to a statistically significant increase R^2 of .115, and a statistically significant prediction of recent experiences of depression $F(1, 175) = 26.839$, $p < .01$.

Table 1*Demographic Information*

Demographic Variables	Frequency	Percentage
Gender		
Female	167	88.8
Male	20	10.6
Transgender	1	.5
Education		
Some College	21	11.2
Bachelor's Degree	20	10.6
Some Graduate Study	75	39.9
Graduate Degree	72	38.3
Household Income		
0-\$20,000	36	19.1
\$20,000 - \$30,000	27	14.4
\$30,000 - \$40,000	23	12.2
\$40,000 - \$50,000	25	13.3
\$50,000 - \$75,000	31	16.5
\$75,000 – above	46	24.5
Race/Ethnicity		
African American	45	23.9
Asian	2	1.1
Multiracial	7	3.7
Caucasian	126	67.0
Latino	8	4.3

Table 2*Descriptive Statistics*

Variables	Mean	Standard Deviation	N
Depression	18.55	7.17	188
Childhood Trauma	62.19	10.85	188
Resilience	39.25	5.56	188

The first research question was the following: What are the relationships between gender, age, income level, education, ethnicity, childhood trauma and experiencing depression and/or resilience in adulthood? Participants were asked to complete the Childhood Trauma Questionnaire, Connor-Davidson Resilience scale, and PROMIS Depression survey. The strength associations for the coefficient values are as follows: $.1 < r < .3$ is a small correlation, $.03 < r < .5$ is a medium/moderate correlation, and $r > .5$ is a large/strong association (Myers, Well, & Lorch, 2010). The Pearson value is used to measure the linear relationship between two values. The Pearson correlation created from the analysis (Table 3) identified significant but small relationships among several of the variables.

In relation to childhood trauma, several small correlations were identified. There was a small positive correlation between childhood trauma and depression, $r = .203$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and symptoms of recent experiences of depression. There was a small positive correlation between childhood trauma and age, $r = .157$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and age, meaning participants who were reported higher ages also reported higher exposure to childhood trauma. This positive correlation supports those who are older in age are more

likely to have experienced childhood trauma. There was a small positive correlation between childhood trauma and education, $r = .105$. More specifically, this correlation was for participants who have some college experience or earned a bachelor degree. This correlation suggests there is a positive linear relationship between experiences of childhood trauma with individuals with some college experience or undergraduate degrees. No correlation was found between childhood trauma and those in graduate school or who earned graduate degrees. There was a negative correlation between childhood trauma and ethnicity, $r = -.130$. More specifically, this correlation suggests there is a negative linear relationship between experiences of childhood trauma with individuals who identify as “White”. There was a small positive correlation between childhood trauma and income, $r = .141$. More specifically, those who had a household income of 30k-40k per year had a small positive correlation to childhood trauma. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and those who had a household income of 30k-40k annually. No correlations were found in other income classifications. There was a small positive correlation between childhood trauma and resilience, $r = .112$. This correlation suggests there is a positive linear relationship between experiences of childhood trauma and experiencing resilience. There was no significant correlation found between childhood trauma and gender. No moderate or strong correlations were found between any of the variables and childhood trauma.

With regards to recent experiences of depression, several correlations were found ranging in size from small to moderate. There was a moderate negative correlation between depression and resilience, $r = -.355$. This correlation suggests there is a negative

linear relationship between depression and resilience, meaning recent experiences of depression and resilience have an inverse effect on one another. There was a small positive correlation between depression and ethnicity, $r = .189$. More specifically, this correlation suggests that there is a positive linear relationship between recent experiences of depression and individuals who identify as “White”. There was a small positive correlation between depression and trauma, $r = .203$. This correlation suggests there is a positive linear relationship between recent experiences of depression and experiencing trauma. There was a small negative correlation between depression and education, $r = -.148$. More specifically, this correlation suggests there is a negative linear relationship between recent experiences of depression with individuals with some graduate school experience or graduate degrees. No correlation was found between recent experiences of depression and those with some undergraduate experience or who earned bachelor degrees. Two correlations were found between recent experiences of depression and income. There was a small negative correlation between depression and those who had a household income of 75k or more per year, $r = -.173$. This correlation suggests there is a negative linear relationship between recent experiences of depression and those who had a household income of 75k or more annually. There was a positive small correlation between depression and those who had a household income of 20-30k annually. This correlation suggests there is a positive linear relationship between recent experiences of depression and those who had a household income of 20-30k annually. There was no significant correlation found between recent experiences of depression and gender, $r = .014$. There was no significant correlation found between recent experiences of

depression and age, $r = -.010$. No strong correlations were found between any of the variables and recent experiences of depression.

With regards to resilience, several correlations were found, ranging from small to moderate. There was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This correlation suggests there is a negative linear relationship between resilience and depression, meaning resilience and recent experiences of depression have an inverse effect on one another. There was a small positive correlation between resilience and gender (female), $r = .174$. More specifically, this correlation suggests there is a positive linear relationship between resilience and being a female. There was a small positive correlation between resilience and trauma, $r = .112$. This correlation suggests there is a positive linear relationship between resilience and experiencing trauma. There were two correlations between resilience and income. There was a small positive correlation between resilience and those who had a household income of 75k or more annually, $r = .127$. This correlation suggests there is a positive linear relationship between resilience and those who had a household income of 75k or more annually. There was a small negative correlation between resilience and those who had a household income of 20k-30k annually, $r = -.124$. This correlation suggests there is a negative linear relationship between resilience and those who have a household income of 20-30k annually. There was no correlation found between resilience and education, $r = -.017$. There was no correlation found between resilience and ethnicity, $r = -.092$. There was no correlation found between resilience and age, $r = .082$.

In summary, several correlations were identified according to the Pearson correlation.

Pearson correlation was used to identify the strength of the linear relationships between

childhood trauma, recent experiences of depression, resilience, income, age, ethnicity, education, and gender. The strongest relationship identified was a moderate negative correlation between resilience and recent experiences of depression. This negative correlations suggests when resilience increases, recent experiences of depression decreases, the variables have an inverse effect on one another. Several small positive correlations were associated with trauma to include: age, resilience, income (30k-40k annually), education (undergraduate school), and recent experiences of depression. Several small positive correlations were associated with recent experiences of depression to include: ethnicity (White), income (20k-30k annually), and trauma. Several small positive correlations were associated with resilience to include: gender (female), income (75k or more annually), and trauma. These positive correlations suggest when one variable increases the associated variable also increases. Several small negative correlations were associated with recent experiences of depression to include: education (graduate school), and income (75k or more annually). Income (20-30k) was the only small negative correlation was associated to resilience. With regard to recent experiences of depression, based off the data analyzed, we reject the null hypothesis, because a majority of the variables had a significant relationship. With regard to trauma, we reject the null hypothesis, because majority of the variables had significant relationships. With regard to resilience, we reject the null hypothesis, because majority of the variables had significant relationships. **Table 3**

Pearson Correlation

	Depression	Trauma	Resilience
Depression	1.000	.203	-.355
Gender	.014	.007	.174
Education (undergrad)	.091	.105	-.017

Education (grad)	-.148	.071	.095
Income (20-30k)	.128	.061	-.124
Income (30-40k)	.077	.141	-.037
Income (40-50k)	.049	.050	.022
Income (50-75k)	-.060	-.067	.054
Income (75k +)	-.173	-.041	.127
Ethnicity	.189	-.130	-.092
Age	-.010	.157	.082
Trauma	.203	1.000	.112
Resilience	-.355	.112	1.000

The second research question was the following: controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? The researcher controlled for demographic variables as the researcher wanted to examine how much variation in the dependent variable can be explained by the addition of one or more independent variables. To control for variables, the demographic variable were analyzed prior to including the independent variables in the analysis.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Controlling for demographic variables and including childhood trauma in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. There was a small positive correlation between experiencing childhood trauma and recent experiences of depression, $r = .203$. The research hypothesis states that adults who have experienced trauma in childhood would have significantly higher rates of depression in adulthood than adults who have not experienced trauma. According to the data analysis, the null hypothesis is rejected, indicating adults who have experienced trauma in

childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma.

The third and final research question was the following: controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of recent experiences of depression? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. As mentioned previously resilience was included in two separate analyses in the prediction of recent experiences of depression. In the first analysis, controlling for demographic variables and the inclusion of resilience in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .098, and a statistically significant prediction of depression $F(1, 176) = 21.386, p < .01$. In the second analysis the researcher controlled for both demographic variables and childhood trauma, and included resilience in the prediction of recent experiences of depression which led to a statistically significant increase in an R^2 of .115, and a statistically significant prediction of depression $F(1, 175) = 26.839, p < .01$. The prediction of recent experiences of depression increased significantly after controlling for childhood trauma and including resilience into the model. After including resilience in the analysis and controlling for demographic variables and childhood trauma R^2 increased from .038 to .115. Also the significance of the prediction increased from .006 to .000. According to the Pearson Correlation matrix there was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This correlation indicates resilience and depression have an inverse relationship. The research

hypothesis stated resilience would moderate depressive symptoms in adults who have experienced trauma as children. According to the data analysis, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children.

Depicted in Table 4 are four multiple regression models. Model A consisted of demographic variables (gender, education, income, race/ethnicity, and age), resilience, and childhood trauma in the prediction of recent experiences of depression. Model A was not hierarchical and did not control for any variables. Model B controlled for the mentioned demographic variables but included the addition of childhood trauma to the prediction of recent experiences of depression. Model C model controlled for the mentioned demographic variables, but included resilience to the prediction of recent experiences of depression. The Model D controlled for both mentioned demographic variables and childhood trauma and included resilience in the prediction of recent experiences of depression.

Table 4

Model Summary

	Model A	Model B	Model C	Model D
R	.501	.369	.443	.501
R Square	.251	.136	.196	.251
Adjusted R Square	.199	.82	.146	.199
St. Error of the Estimate	6.41697	6.87190	6.62827	6.41697
R Square Change	N/A	.038	.098	.115
F Change	4.882	7.369	21.386	26.839
df.1	12	1	1	1
df2	175	176	176	175
Sig. F Change	.000	.006	.000	.000

DISCUSSION

The relationships between childhood trauma, recent experiences of depression, and resilience were examined in this study because literature supports a strong association between depression and childhood trauma. However, limited research has been conducted to examine the role of resilience in trauma survivors (Wingo et al., 2010). Investigating the role of resilience in trauma survivors can provide mental health providers with insights into effective treatment for trauma survivors (Howell & Miller-Graff, 2014). The results from this study indicate that resilience does moderate depressive symptoms in adults who have experienced trauma as children. As mental health professionals, we can increase the resilience of patients who have previously experienced trauma (Davydov, Stewart, Ritchie, & Chaudieu, 2010). Mental health treatment focused on building resilience can enhance protective processes (e.g., resources, competencies, talents and skills) that reside within the individual, within the family or peer network, and within the community (Rutter, 1987b). Focusing on resilience allows mental health practitioners to provide effective solution focused treatment (Luthar & Cicchetti, 2000). Resilience in mental health treatment focuses on: acceptance, hope, determination to change, accountability, active coping, social support, self-knowledge, and increased well-being (Havas et al., 2016).

The researcher collected online responses using SurveyMonkey. A total of 188 were determined to be complete and valid. The data collected from the study was analyzed using hierarchical multiple regression. A demographic questionnaire was used to collect information. The questionnaire included the following; (1) gender, (2) total household income and number in household, (3) highest level of education obtained, (4) ethnicity, and (5) age.

The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. With regard to relationships associated with recent experiences of depression, we reject the null hypothesis, because a majority of the variables had a significant relationship. With regard to relationships associated with trauma, we reject the null hypothesis, because majority of the variables had significant relationships. With regard to relationships associated with resilience we reject the null hypothesis, because majority of the variables had significant relationships. According to the data analysis for research questions two, the null hypothesis is rejected, indicating adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. According to the data analysis for research question three, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children. This chapter will discuss the results, limitations and implications of this study.

The purpose of this study is to examine the relationship between childhood trauma, recent experiences of depression, and resilience. The instruments used for this study were the CTQ, PROMIS Depression short form, and CD-RISC. Based on the data collected in this study the minimum score on the CD-RISC was 19, the maximum score was 50. The mean of the CD-RISC was 39.25 and the standard deviation was 5.56. Participants in this study scored higher than the means of the CD-RISC which is report to be 32.1 with a standard deviation of 5.8 (Davidson & Connor, 2015). Based on the data collected in this study the minimum score on the CTQ was 45, the maximum score was

101. The means for the CTQ was 62.19 and the standard deviation was 10.85. The mean scores to validate the CTQ for men and women were 53.4 (Bernstein & Fink, 1998). The data collected from this study is within normal limits of valid scores on the CTQ. The data also indicated the minimum score on the PROMIS scale was 8, and the maximum score was 40. The mean was 18.55 with a standard deviation of 7.17. No information about the PROMIS average descriptive statistics are provided in the user manual. The total number of eligible participants was $N=188$. The most frequently chosen demographic group of respondents were female (88.8%, $n=167$), Caucasian (67.0%, $n=126$), who had a household income of \$75,000 and above (24.5%, $n=46$), completed some graduate study (39.9%, $n=75$), and age 24 (7.4%, $n=14$). Male and Transgender individuals combined to represent 11.1%, $n=21$ of participants. The second largest income group represented was individuals who had a household income 0-\$20,000 annually (19.1%, $n=36$). The least represented income group was individuals who had a household income of \$30,000 - \$40,000 (12.2%, $n=23$). The second largest ethnic group represented was African Americans (23.9%, $n=45$). The least represented ethnic group was Asian Americans, who represented 1.1%, $n=2$.

Research question one sought to examine the relationships between gender, income level, education, ethnicity, depression, resilience, and childhood trauma. To analyze significance of relationships the researcher reviewed the Pearson correlations. The strongest relationship identified was a moderate negative correlation between resilience and recent experiences of depression, which supports current literature, those that higher levels of resilience are associated with fewer negative life outcomes, such as depression (Spilman, Smith, Schirmer, & Tonui, 2015).

Several small positive correlations were associated with trauma including age, resilience, income (30k-40k annually), education (undergraduate school), and recent experiences of depression. The positive correlation between recent experiences of depression and trauma is congruent with current literature which states trauma survivors are more likely to experience symptoms of recent experiences of depression than individuals who have not experienced trauma (Nakia et al., 2015). The correlation between age and trauma suggests there is a positive linear relationship between experiences of childhood trauma and age. Meaning participants who were older reported higher exposure to childhood trauma. This positive correlation supports those who are older in age were more likely to experience childhood trauma. Trends in child discipline may be contributing to this positive correlation as parents were more aggressive when disciplining their children in the 50's, 60's and 70's. Many things we presently consider to be child abuse were normal practice in disciplining children (switches, belts, and beatings). On Jan. 31, 1974, the Child Abuse Prevention and Treatment Act was passed, the purpose of the act was to prevent, identify, and treat child abuse and neglect (Stein, 1984). This act shifted culture of discipline in our nation.

The positive correlation between resilience and trauma supports the notion that those who experience traumatic events are more resilient. These findings are in contrast to Simeon et al., (2007) who found childhood trauma and resilience had a moderate inverse relationship ($r = -.43$). These contradictory findings are likely based on the measures administered and variables examined in the study. Simeon et al., administered the Defense Style Questionnaire, the Relationship Questionnaire, the Childhood Trauma Questionnaire, and the Tridimensional Personality Questionnaire. Also, the participants

in this study have successfully made it to college, therefore the resilience levels in participants of this study may be elevated compared to the general population. These contradictory findings support Alvord and Grados (2005), who suggested that continued research is needed to understand the role resilience has in survivors of childhood trauma. Research is limited focusing on resiliency after experiencing trauma, current research has been unable to determine the distinction between resilient individuals and a gradual recovery from trauma (Bonanno, 2004). In fact, a growing number of studies have shown individuals exhibit fewer psychological symptoms as time passes from the traumatic event (Bonanno, Moskowitz, Papa, & Folkman, 2005). The increase of resilience after experiencing a traumatic event could be related to individuals seeking mental health services, support, or psychological growth, and there is a need for more systemic research to determine the source of resilience (Bonanno, Galea, Bucciarelli, & Vlahov, 2006).

The positive correlation between trauma and a reported household income of 30k-40k, supports the Lowe et al., 2015 findings, which indicated that those who live in low income neighborhoods with high crime rates are more likely to experience trauma. No correlation was found between trauma and those who reported a total household income of 20k-30k, which was the lowest income category in this study, these findings are in contrast to previous studies which found trauma to be associated with individuals with low income (Cross, Crow, Powers, & Bradley, 2015). No correlation was associated between trauma and reported incomes of 40k-50k, 50k-75k, and 75k and above. These lack or correlations support the two previously mentioned studies supporting the association between lower incomes and experiencing trauma.

No correlation between gender and childhood trauma was supported. This does not support previous research, which indicates females are more likely to experience childhood trauma, specifically sexual abuse (Messina & Grella, 2006; Levitan et al., 1998). No correlation between gender and trauma could be impacted by men denying experiencing sexual abuse, a previous study found men are less likely to report/disclose being sexually abused, because they fear being viewed as homosexuals or victims (Romona 2005).

The negative correlation found between “Whites” and trauma is in contrast to Perez Benitez et al., (2010) findings which found Whites are more likely to experience childhood trauma, specifically neglect and emotional abuse. This contrast in finding is likely due to the type of trauma reported by the CTQ. Perez Benitez et al., (2010), also found that African Americans and Latinos had higher rates of witnessing trauma, specifically seeing someone severely injured or killed.

Several small positive correlations were associated with recent experiences of depression to include: ethnicity (White), income (20k-30k annually), and trauma. The positive correlation between recent experiences of depression and ethnicity (White) is supported by other findings such as Riolo, Nguyen, Greden, and King (2005), who found major depressive disorder was significantly higher in Caucasians than in other cultures. Several small negative correlations were associated with recent experiences of depression to include: ethnicity (White), education (graduate school), and income (75k or more annually).

Two categories of income were associated with recent experiences of depression there was a positive correlation between recent experiences of depression and a reported

total household income of 20k-30k, and a negative correlation between recent experiences of depression and a reported total household income of 75k or more. No correlations were found between recent experiences of depression and a reported household income of 30-40k, 40-50k, or 50-75k. The positive correlation between depression and lower income (20k-30k) supports Zimmerman and Katon (2005), who argued that experiences and persistence of depression are higher among persons with low incomes. Zimmerman and Katon (2005) findings also support the negative correlation between recent experiences of depression and a reported household income of 75k or more.

Several small positive correlations were associated with resilience to include: gender (female), income (75k or more annually), and trauma. The negative correlation between recent experiences of depression and higher levels of income (75k or more) income also supports Zimmerman and Katon, (2005). The study found that Whites had a positive correlation to recent experiences of depression but a negative correlation to trauma, with no significant correlation to resilience. These findings are contradictory to other findings in this study and other literature, which supports a positive correlation between both depression and trauma (Kendler, Gardner, & Prescott, 2002; Brewin, Andrews, & Valentine, 2000; Kessler et al., 2010; Collishaw, Pickles, Messer, Rutter, Shearer, & Maughan, 2007). The inverse relationship between Whites and trauma could be due to a limitation in the CTQ scale which only captures trauma in five categories to include: physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect. The scale does not capture witnessed trauma, and it is supported that other

ethnicities are more likely to witness severe traumatic experiences than Whites (Perez Benitez et al., 2010).

The second research question was the following: controlling for demographic variables, how does experiencing childhood trauma predict depression in adulthood? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. Controlling for demographic variables and including childhood trauma in the prediction of recent experiences of depression led to a statistically significant increase in an R^2 of .038, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 7.639, p < .01$. The results suggest childhood trauma is a strong predictor of recent experiences of depression, as it is significant $<.01$. There was also a small positive correlation between experiencing childhood trauma and recent experiences of depression, $r = .203$. This correlation supports a study conducted by Carr, Martins, Stingel, Lemgruber, & Juruena (2013), which indicated those who experienced trauma have a stronger association with recent experiences of depression than any other mental health disorder. The research hypothesis states that adults who have experienced trauma in childhood would have significantly higher rates of recent experiences of depression in adulthood than adults who have not experienced trauma. According to the data analysis, the null hypothesis is rejected, indicating adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. This data supports existing literature, experiencing childhood trauma increases the likelihood of experiencing depression in adulthood (Kendler, Gardner, & Prescott, 2002; Brewin,

Andrews, & Valentine, 2000; Kessler et al., 2010; Collishaw, Pickles, Messer, Rutter, Shearer, & Maughan, 2007).

The third and final research question was the following: controlling for demographic variables, how does resilience impact the relationship between childhood trauma and adult experiences of depression? The full standard regression model of gender, income, education, ethnicity, age, resilience and childhood trauma to predict recent experiences of depression was statistically significant $F(12, 175) = 4.882, p < .01$, adjusted $R^2 = .199$. As mentioned previously, resilience was included in two separate analyses in the prediction of recent experiences of depression. In the first analysis, controlling for demographic variables and the inclusion of resilience in the prediction of depression led to a statistically significant increase in an R^2 of .098, and a statistically significant prediction of recent experiences of depression $F(1, 176) = 21.386, p < .01$. In the second analysis, the researcher controlled for both demographic variables and childhood trauma, and included resilience in the prediction of recent experiences of depression which led to a statistically significant increase in an R^2 of .115, and a statistically significant prediction of recent experiences of depression $F(1, 175) = 26.839, p < .01$. The prediction of recent experiences of depression increased significantly after controlling for childhood trauma and including resilience into the model. After including resilience in the analysis and controlling for demographic variables and childhood trauma R^2 increased from .038 to .115. Also the significance of the prediction increased from .006 to .000. According to the Pearson Correlation matrix there was a moderate negative correlation between resilience and recent experiences of depression, $r = -.355$. This negative correlation is consistent with other literature, as resilience has been credited with

working as a buffer between trauma and depression (Luthar & Cicchetti, 2000; Jopp & Rott 2006; Andreescu et al., 2007). The research hypothesis stated resilience would moderate depressive symptoms in adults who have experienced trauma as children. According to the data analysis, the null hypothesis is rejected, indicating resilience does moderate depressive symptoms in adults who have experienced trauma as children. The results of this study support Wingo et al., 2010 study in which indicated trauma exposure contributed to depressive symptoms severity while resilience moderated symptoms of recent experiences of depression.

IMPLICATIONS

Mental health professionals may find the results of this study to have beneficial implications. Previous studies have researched the associations between resilience and depression (Beardslee & Podorefsky, 1988; Bisschop, Kriegsman, Beekman, & Deeg, 2004; Davydov et al., 2010; Diehl & Hay, 2013). However research is limited regarding the relationship between resilience and depression after the experience of a traumatic event (Min et al., 2013; Rutten et al., 2013; Southwick & Charney, 2012). Understanding the role of resilience in trauma survivors provides mental health providers with greater insight allow them to adjust treatment to more effectively treat trauma survivors (Howell & Miller-Graff, 2014). Resilience in mental health treatment focuses on: acceptance, hope, determination to change, accountability, active coping, social support, self-knowledge, and increased well-being (Havas, et al., 2016).

Pereria, Barkham, Kellett, and Saxon (2016), found significantly improvement in patient outcomes with depressed clients who were treated by practitioners who combined resilience with mindfulness. Mindfulness is a process of focusing one's attention on what

is occurring in the present moment and being able to accept these occurrences or experiences in a nonjudgmental manner (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). An effective combination of both mindfulness and resilience can be achieved through treatment that is guided by the present moment, strength based techniques, and personalized therapeutic rapport (Pereria, Barkham, Kellett, & Saxon, 2016).

It is well established that individuals who experience trauma are more likely to experience depression (Spilman, Smith, Schirmer, & Tonui, 2015; Norman et al., 2012; Nakia et al., 2015). Yet resilience in trauma survivors has not been thoroughly explored and continued research was needed (Loh, Schutte, & Thorsteinsson, 2014). This study fills a gap in current literature by investigating the relationships between trauma survivors, depression, and resilience. The results from this study indicate that resilience does moderate depressive symptoms in adults who have experienced trauma as children. As mental health professionals, this information can be used to improve treatment to increase the resilience of patients who have previously experienced trauma. Overcoming obstacles can be difficult, however, resilience is the process that helps people adapt in the face of adversity. The premise of resilience is about overcoming an obstacle, and moving past negative situations. As mental health professionals we can foster resilience in our clients through modeling, goal setting, homework, positive reinforcement, and affirming a client's progress.

Trauma is an event that can happen at any place, anytime, to anyone. In the helping professions, we are trained to be reactive when treating those effected by trauma, essentially waiting for a client to seek services after experiencing negative symptoms associated with trauma (depression, anxiety, sleep disturbances). Our primary duty as

counselors is to assist those we serve. As mental health professionals, if we continue to be reactive in treating these ailments, we are doing our clients and communities a disservice. We must take a proactive approach and impact our community at the macro level. To impact our communities at the macro level we must identify the problems in the communities and assist those community members to make a change. Lobbying for issues that affect the community, and promoting change for safer neighborhoods, improved education, more jobs, and other initiatives which enhance positive resources and decrease community threats.

Proactively fostering resilience and empowering our clients and communities will continuously assist those who we serve. Proactively fostering resilience will help our clients more effectively manage stress, cope with adjustments, and reduce psychological symptoms associated with trauma. As mental health professionals we can proactively nurture resilience in our communities by creating positive support networks, increasing community involvement, help our communities set goals, advocate for our communities, celebrate community achievements, and foster community pride. As counselors we can advocate for our communities not only through lobbying but we can also advocate through mental health. We can provide mental health services to those in the communities for example: teen support groups, addiction groups, parenting seminars, career counseling, and family counseling.

As a mental health advocates, we should be striving to promote a positive change in the communities. Resilience can be proactively nurtured in the schools, places of worship, and in the work place with some of the same methods. The key is to create a positive community environment, set goals, celebrate achievements, and increase

involvement. Considerable research has indicated individuals in lower socioeconomic status (SES) report more emotional distress than their higher SES counterparts (McLeod & Kessler, 1990). Individuals living in lower SES communities are at higher risk of emotional distress and have fewer resources to promote resilience compared to communities with higher socioeconomic status (Gallo, Borgart, Vranceanu & Matthews, 2005). All communities need additional resources to promote resilience, however, additional resources in communities with lower SES will assist in proportionality promoting resilience in all communities.

The effects of trauma can be devastating and long lasting. Due to the prevalence of trauma experienced in our communities it is likely that mental health professionals will work with clients who are battling issues related to trauma. It is important that helping professionals are equipped with the skills and resources to handle trauma related issues. Trauma informed care encompasses the understanding of the neurological, biological, psychological, and social effects of trauma (Hopper, Bassuk, & Olivet, 2010). A trauma informed counseling approach utilizes six key principles: safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, and cultural, historical, and gender issues (Substance Abuse and Mental Health Services Administration, 2014). These key principles can be applied in multiple settings (groups, individual, family). Staff training, consultation, continued education, and supervision are all important aspects of systemic change to incorporate trauma informed care (Hopper, Bassuk, and Olivet, 2010).

Counselor educators may find the results of this study to have beneficial implications. Resiliency is an important construct for understanding why some people do

not develop psychological and behavioral problems after experiencing adversity or traumatic events (Luthar, Cicchetti, & Becker, 2000). Educating counselors on the construct of resilience in mental health treatment is vital to promote safety and change among survivors of trauma, including strength based treatment and interventions (Yuan, 2015). Education about resilience can be employed through professional presentations, in the classroom, and throughout supervision. Resilience can also be fostered in the classroom through creating a positive education environment, assisting students set and accomplish goals, celebrate academic achievement, and empowering students to foster positive relationships.

Research related to resilience and trauma is scarce, these findings expand on current research related to resilience and experienced trauma. Based on the data derived from this study, it is proven resilience does moderate depressive symptoms in adults who have experienced trauma as children. The results of this study support the Wingo et al., 2010 study in which indicated trauma exposure contributed to depressive symptoms severity while resilience moderated it. In other literature, resilience has been credited with working as a buffer between trauma and depression (Luthar & Cicchetti, 2000; Jopp & Rott 2006; Andreescu et al., 2007).

LIMITATIONS

There were numerous limitations in this study. The most represented groups of participants were Caucasian females who reported a household income of at least \$75,000 and completed some form of graduate study. These demographic factors pose a threat to external validity, because the most represented groups in this study are not generalizable to the majority of university student population. Also, many of the

participants were counseling, human services, and psychology majors, which proposes a limitation to the generalization of the university student population. All data was gathered through self-report, the results may have been affected by any participants' decision to respond in an untruthful manner, and individuals from different circumstances and identities may differ in their conceptualization of trauma. For example, individuals who live in environments with high crime and who frequently witness violence are likely to be desensitized to violence (Gaylord-Harden, Cunningham & Zelencik, 2011). It is likely that individuals in this study from various backgrounds conceptualize their past experiences related to trauma differently.

The data collected relied on information to be gathered retrospectively, which provides limitations to accuracy of data, and participants' ability to recall previous events. The instruments used are based on specific DSM 5 criteria, created to diagnose mental health based on American standards, therefore cultural encapsulation is a limitation of the study. The CTQ has low alpha scores on the physical neglect subscale, enhancing the odds that the observed result is due to chance. In addition, it also only measures trauma based upon "childhood maltreatment" and may omit experiences of other sources of childhood trauma. The number of members in each household was not included in the analysis of household income. Similar to other studies that researched similar variables, this presents a limitation as it is not an accurate representation of individual income, and the socioeconomic status of individuals living with multiple members in a household with higher reported incomes are misrepresented (Wingo et al., 2010; Coates, Phares, & Dedrick 2013). The PROMIS depression survey inquires only about the last 7 days, which may not accurately represent experiences of depression for

participants. This research did not offer participants an avenue to respond freely (e.g., interview, written response).

This study also did not offer alternative methods to complete the survey, interpretation of questions depended on the participant's reading comprehension. Only electronic surveys were used in this study, which proposes a threat to sampling, respondent availability, potentially increased confusion (no one physical present to directly answer questions), and possible survey fraud. All participants in this study are volunteers and a convenience sample was used. Both of these factors pose threats to external validity because research has revealed that volunteers do not have the same characteristics as the general population (Rosenthal & Rosnow, 1976). In this study, a large population of university students were accessed, however the study received a very small response rate. A small response rate is a limitation because of non-response bias. This sample may not accurately represent of the student body from the universities contacted. All participants were recruited through online request to academic departments, the researcher is unable to determine how many potential participants were introduced to the survey.

CONTINUED RESEARCH

To expand on these findings, future studies could focus on additional variables associated with childhood trauma such as hope, substance use, and other mental health disorders. Studies should also identify a population outside of university students. The most frequently chosen demographic groups of participants in this study were Caucasian females who completed at least some graduate form of education., Future studies should identify a more diverse population of participants. In this study, a large population of

university students were accessed, however the study received a very small response rate. All participants were recruited through online request to academic departments, the researcher is unable to determine how many potential participants were introduced to the survey. This research did not offer participants an avenue to respond freely (e.g., interview, written response). Future studies should analyze data with both qualitative and quantitative data research methods allowing the participants to have their individual voice in the data. The benefit of incorporating qualitative data will allow the participants to have a voice regarding their experiences of trauma, recent experiences of depression, and factors that influence resilience. The data collected relied on information to be gathered retrospectively, future studies should consider using instruments or interviews that focus on information to be gathered from more recent experiences. Allowing the participants to respond to symptoms of the present day could provide the researcher with prospective data as opposed to retrospective data. Only electronic surveys were used in this study, future studies should consider in person surveys and/or in person interviews.

As mentioned previously several factors contribute to the variance in reactions after experiencing a traumatic event, one factor is a post-traumatic growth. Post-traumatic growth is the experience of positive change that occurs as a result of the struggle with highly challenging life crises' (Tedeschi & Calhoun, 2004). The concept of post-traumatic growth is in the early stages of investigation therefore research is limited (Li, Cao, Cao, & Liu, 2015). Post-traumatic growth may result in individuals displaying higher levels of self-efficacy, increased spirituality, greater appreciation for life, or identify a more fulfilling path for the future (Sheikh, 2008). Both resilience and post-traumatic growth are constructs that result in positive adaptation after a traumatic event. Li,

Cao, Cao, & Liu (2015), found those who have high levels of resilience are less likely to experience post-traumatic growth. This is attributed to people with higher level of resilience not experiencing psychological seismic, which is necessary for a person to experience post-traumatic growth (Li, Cao, Cao, & Liu, 2015). Post-traumatic growth is an emerging area of research related to the positive psychological changes that occur after experiencing trauma, and continued research is need to understand the relationship between post-traumatic growth and resilience.

Upon examination of literature, there is a large gap in scholarly research focused on the impacts of resilience in relation to survivors of childhood trauma (Wingo et al., 2010). Continued research on resilience can be used to improve the effectiveness of treatment with patients who have experienced trauma, and to compare outcomes in treatment with clinicians who focus on increasing resilience in clients versus those who don't. This study contributed to the limited literature in the mental health field regarding the relationships between trauma, recent experiences of depression, and resilience, and hopefully will stimulate additional research studies on this topic.

CONCLUSION

Although experiences of trauma are common, reactions vary due to the variety of bio-psychosocial and cultural factors that influence the individual reaction to the trauma (Nakai et al., 2015). This is attributed in part to resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). Resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thorsteinsson, 2014). This study used a hierarchical multiple regression to

examine the relationships between childhood trauma, recent experiences of depression, and resilience in adult university students.

The results of this study suggest resilience does moderate depressive symptoms in adults who have experienced trauma as children. The study also determined that adults who have experienced trauma in childhood do have significantly higher rates of depression in adulthood than adults who have not experienced trauma. The study identified significant but small relationships among several of the variables, including: childhood trauma and ethnicity, childhood trauma and age, childhood trauma and income, childhood trauma and education, childhood trauma and resilience, childhood trauma and recent experiences of depression, recent experiences of depression and ethnicity, recent experiences of depression and education, recent experiences of depression and income, resilience and gender, resilience and income, and resilience and trauma.

As mental health professionals we can proactively nurture resilience in our communities by creating positive support networks, increasing community involvement, help our communities set goals, advocate for our communities, celebrate community achievements, and foster community pride. As counselors we can advocate for our communities not only through lobbying but we can also advocate for comprehensive mental health services, both treatment and prevention. We can provide mental health services to those in the communities for example: teen support groups, addiction groups, parenting seminars, career counseling, and family counseling. As a mental health advocates, we should be striving to promote a positive change in the communities. Resilience can be proactively nurtured in the schools, places of worship, and in the work place with some of the same methods. The key is to create a positive community

environment, set goals, celebrate achievements, and increase involvement. Future studies related to trauma, resilience, and depression can be used to improve the treatment of patients who have experienced trauma.

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APPENDIX A

To whom it may concern,

Your consideration is requested to participate in Dissertation study “Exploring the relationship between depression and resilience in survivors of childhood trauma”. If you choose to participate in the study please review the information below. In participating in this study, you will be required to complete an informed consent, demographic form, and three survey instruments. While conducting research for this study, I remain under the immediate supervision of Dr. Tim Grothaus. Thank you for your time and consideration.

Summary of Study

Although experiences of trauma are common, reactions vary due to the variety of biopsychosocial and cultural factors that influence the individual reaction to the trauma (Nakai, et al., 2015). This is attributed in part to resiliency, the capability to adapt in adverse environmental circumstances (Basim & Cetin, 2011). In Simeon et al.’s study conducted in 2007, childhood trauma was identified as the leading determinant of psychological resilience: the two factors exhibited a strong inverse relationship. Resilience in trauma survivors has not been thoroughly explored and continued research is needed (Loh, Schutte, & Thosteinsson, 2014). This study will use hierarchical multiple regression to analyze data. It is the aim of this study to examine the relationships between childhood trauma, depression, and resilience in a sample of adult university students.

Instrumentation

In this study, exposure to childhood trauma will be assessed using the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998). Depression will be measured using the PROMIS Emotional Distress-Depression-Short Form (PROMIS Health Organization [PHO] and PROMIS Cooperative Group, 2013). Resilience will be assessed using the Connor-Davidson Resilience 10 item Scale (CD-RISC-10) (Connor & Davidson, 2003). The assessments will be administered via online survey format to all participants.

Childhood Trauma Questionnaire- is a self-reporting questionnaire used to identify adolescents and adults with histories of trauma.

PROMIS Emotional Distress-Depression- is an 8-item assessment that focuses on the domain of depression in individuals ages 18 and older.

Connor-Davidson Resilience Scale- is a self-reporting 10-item questionnaire to identify resilience and other constructs related to resilience such as hardiness, self-efficacy, the strengthening effect of stress, close relationships to others, and an action oriented approach to situations.

Marquis A. Norton Ph.D Candidate, MA, NCC, Resident in Counseling
Old Dominion University
110 Education Building
Norfolk, VA 23529
ph. (917) 569-7945

APPENDIX B
INFORMED CONSENT DOCUMENT
OLD DOMINION UNIVERSITY

PROJECT TITLE: Exploring the relationship between depression and resilience in survivors of childhood trauma.

INTRODUCTION

The purposes, of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research. Exploring the relationship between depression and resilience in survivors of childhood trauma. All studies will be conducted online.

RESEARCHERS

Dr. Tim Grothaus is the responsible project investigator, and Marquis A. Norton is the primary researcher of this study. Marquis has a Master in Community Counseling and is a Doctoral Candidate in pursuit of a PhD. in Counselor Education and Supervision at Old Dominion University, Darden College of Education. Additional investigators are: Dr. Tim Grothaus, Dr. Jeffrey Moe, and Dr. Cyrus Williams.

DESCRIPTION OF RESEARCH STUDY

Several studies have been conducted looking into the subject of childhood trauma. None of them have explained the relationship and lasting effects of resilience and depression among this population.

If you decide to participate, then you will join a study involving research of completion of survey in its entirety. If you say YES, then your participation will last for the amount of time required to complete survey online. Approximately 200 subjects will be participating in this study.

EXCLUSIONARY CRITERIA

You should be completing demographic questionnaire, the CTQ, the PROMIS Emotional Distress-Depression-Short Form, and the Connor-Davidson Resilience 10 item scale. To the best of your knowledge, you should not have un-enrolled in a college or University that would keep you from participating in this study.

RISKS AND BENEFITS

RISKS: If you decide to participate in this study, then you may face a risk of answering uncomfortable questions, reemerging of uncomfortable thoughts, and recollecting uncomfortable experiences. The researcher tried to reduce these risks by removing all linking identifiers. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS: The main benefit to you for participating in this study. Others may benefit by participation in a study geared to increase awareness of childhood trauma.

COSTS AND PAYMENTS

The researchers want your decision about participating in this study to be absolutely voluntary. Yet they recognize that your participation may pose inconvenience. The researchers are unable to give you any payment for participating in this study.

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY

The researchers will take "reasonable" steps to keep private information, such as questionnaires, and demographic information confidential. The researcher will remove identifiers from the information, and all information will be kept in a password protected data base. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify you. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time. Your decision will not affect your relationship with Old Dominion University, or otherwise cause a loss of benefits to which you might otherwise be entitled. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation.

COMPENSATION FOR ILLNESS AND INJURY

If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact the responsible principal investigator or investigators at the following phone numbers, Dr. Petros Katsioloudis current Chair of the Darden College of Education Human Subjects Review Committee, pkatsiol@odu.edu, or the Old Dominion University Office of Research at 757-683-3460 who will be glad to review the matter with you.

VOLUNTARY CONSENT

By agreeing to this form, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Marquis A. Norton (917) 569-7945
Dr. Tim Grothaus (757) 683-3007

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. Petros Katsioloudis, current Chair of the Darden College of Education Human Subjects Review Committee, pkatsiol@odu.edu, or the Old Dominion University Office of Research, at 757-683-3460.

If at any time as participant you begin to have suicidal thoughts you are encouraged to contact the National Suicide Prevention Lifeline. The National Suicide Prevention Lifeline 1-800-273-TALK (8255) is the United States suicide prevention network. After dialing 1-800-273-TALK the caller will be routed to the nearest crisis center.

And importantly, by clicking "yes", you are telling the researcher YES, that you agree to participate in this study. The researcher should give you a copy of this form for your records.

<p>Click "yes" to continue with study. Participants will be required to click "yes" to continue with this study</p>	<p>Date</p>
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INVESTIGATOR'S STATEMENT

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating. I am aware of my obligations under state and federal laws, and promise compliance. I have answered the subject's questions and have encouraged him/her to ask additional questions at any time during the course of this study.

<p>Click "yes" to continue with study.</p>	<p>Date</p>
--	-------------

APPENDIX C

Demographic Sheet

Thank you for your participation in this study!

Please answer each of the following questions:

1. What is your gender: Male Female Transgender

2. Are you currently enrolled in a College or University? Yes No

3. Please select you're the highest level/grade completed

<input type="checkbox"/>	Some College
<input type="checkbox"/>	Bachelor's Degree
<input type="checkbox"/>	Some Graduate Study
<input type="checkbox"/>	Graduate Degree

4 a. How many people are in your household? _____

4 b. What is your Household Income: (check one)

<input type="checkbox"/>	0-\$20,000
<input type="checkbox"/>	\$20,000- \$30,000
<input type="checkbox"/>	\$30,000-\$40,000
<input type="checkbox"/>	\$40,000-\$50,000
<input type="checkbox"/>	\$50,000-\$75,000
<input type="checkbox"/>	\$75,000- above

5. Please indicate your race/ethnicity _____

6. What is your age (participants must be 18 years or older)? _____

7. If you wish to know the results of this study, please share your email

Appendix D

The CD-RISC-10 is a briefer version of the CD-RISC-25. The CD-RISC is comprised of items 1, 4, 6, 7, 8, 11, 14, 16, 17, and 19 from the CD-RISC-25.

Connor-Davidson Resilience Scale 25 (CD-RISC-25)

initials ID# date visit age

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Appendix E

LEVEL 2—Depression—Adult*

*PROMIS Emotional Distress—Depression—Short Form

Name: _____ Age: _____ Sex: Male Female Date: _____

If the measure is being completed by an informant, what is your relationship with the individual receiving care? _____

In a typical week, approximately how much time do you spend with the individual receiving care? _____ hours/week

Instructions: On the DSM-5 Level 1 cross-cutting questionnaire that you just completed, you indicated that *during the past 2 weeks* you (the individual receiving care) have been bothered by “no interest or pleasure in doing things” and/or “feeling down, depressed, or hopeless” at a mild or greater level of severity. The questions below ask about these feelings in more detail and especially how often you (the individual receiving care) have been bothered by a list of symptoms **during the past 7 days**. Please respond to each item by marking (✓ or x) one box per row.

						Clinician Use	
In the past SEVEN (7) DAYS....						Item Score	
		Never	Rarely	Sometimes	Often		Always
1.	I felt worthless.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
2.	I felt that I had nothing to look forward to.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
3.	I felt helpless.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
4.	I felt sad.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
5.	I felt like a failure.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
6.	I felt depressed.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
7.	I felt unhappy.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
8.	I felt hopeless.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	
Total/Partial Raw Score:							
Prorated Total Raw Score:							
T-Score:							

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 Any other use, including electronic use, requires written permission of the PHO.

VITA

Marquis A. Norton

Ph. D Candidate, National Certified Counselor, Resident in Counseling (VA)

M: (917) 569-7945
Marquis.norton@gmail.com**Mental Health Administration: Clinical Supervision***Impacting mental health by improving the communities we serve.*

Resourceful leader with years of experience in all phases of mental health administration. Exceptional skills in: long range planning, program development, clinical supervision, program design, regulatory compliance, fiscal management, market research, business planning, and strategy execution.

Education/ Certifications:

Old Dominion University: Ph. D Candidate, Counseling (Anticipated graduation 12/2016)
Regent University: Master of Arts, Counseling
Hampton University: Bachelor of Arts, Psychology
License Eligible (LPC), Resident in Counseling, Commonwealth of Virginia.
NCC, National Certified Counselor

Professional Experience**SENTARA HEALTHCARE**

AUG. 2014–Present

PSYCHIATRIC EMERGENCY RESPONSE SERVICES CLINICIAN, NORFOLK, VIRGINIA

Emergency Psychiatric | Psychiatric Assessor | Inpatient Psych.

As a psychiatric assessor I provided crisis assessment and interventions to identify individuals who were an imminent threat to themselves or others and determines possible need for inpatient treatment. To ensure individuals received comprehensive care I coordinated with private and community resources.

- Conduct psychosocial assessments to determine appropriate level of care for patients in Sentara emergency department.
- Collaborate with Medical Doctors and Psychiatrist to review inpatient criteria and determine if patient is a threat to themselves of others.
- Facilitate inpatient psychiatric admissions.
- Assist with petitioning for Temporary Detainment Orders (TDO's)/Emergency Custody Orders (ECO's) for individuals that lack the capacity to be voluntarily admitted.

DEPARTMENT OF BEHAVIORAL HEALTH AND HUMAN SERVICES (DBHDS)

JAN. 2014–JULY 2015

HUMAN RIGHTS COMMITTEE CHAIR, VIRGINIA BEACH, VIRGINIA

Compliance | Regulations | Community Mental Health | Human Rights

As the chair of the Virginia Beach Local Human Rights Committee, I reviewed human right violations of all licensed mental health providers in Virginia Beach, VA. This committee was tasked to govern multiple mental health providers and ensure they were in compliance with human rights policies

- Conducted committee hearings with mental health providers and made recommendations for human rights complaints.
- Ensured licensed providers were adhering to all human rights regulations.
- Held closed sessions with providers to discuss human rights complaints and made recommendations to ensure the rights of the clients being served were not being compromised.
- Collaborated with various community providers to assist with program development to ensure client rights were not jeopardized.

UNIVERSAL HEALTH SERVICES

AUG. 2012–AUG. 2014

PROGRAM MANAGER, PORTSMOUTH, VIRGINIA

Administration | Clinical Supervision | Program Development

Continued...

Marquis A. Norton

marquis.norton@gmail.com

Page 2 of 2

As a program manager with Universal Health Services, I managed the daily operations of the Therapeutic Day treatment program in Hampton Roads. In this role I assumed administrative responsibilities of the program.

- Operated and managed daily operations of the program to include: admissions, meeting budget goals, quality management, staffing, outcome studies, program development, and insurance authorization.
- Provided clinical supervision to staff assigned to the program.
- Developed the program to include: marketing, admissions, curriculum development, and program evaluation.
- Superseded the designated budget by 150k.

ACI, CHEMICAL DEPENDENCE TREATMENT CENTERS

MAY 2010–AUG. 2012

PROGRAM MANAGER, MANHATTAN, NEW YORK

Administration | Program Development | Substance Abuse

As a program manager with ACI, I developed, managed, and operated the program Sober House. Sober House was a residential rehabilitative housing program in collaboration with the inpatient chemical detox, and outpatient detox program. The program was based in Manhattan, New York.

- Created program proposal and developed the program to be in compliance with all regulatory bodies.
- Operated and managed daily operations of the program to include: fiscal management, staffing, program development, admissions, facilitate in service training, and documentation review.
- Collaborated with treatment providers to create treatment plans, quarterly reviews and assist with discharge planning.
- Acted as an advocate for patients who were involved in legal issues due to substance use.

Professional Clinical Experience

CLINICAL SUPERVISOR, Old Dominion University

JAN. 2010–AUG. 2012

- As a supervisor I provided guidance and direction to counselors specifically related to their counseling skills and development of professional identity

COUNSELOR, Center for Child and Family Services

JAN. 2012–MAY 2012

- As a counselor, I conducted counseling in a variety of therapeutic settings (individual, group, family). I also participated in program development, as well as grant writing to increase revenue

BEHAVIORAL COUNSELOR, Hampton Newport News CSB

DEC. 2010–SEPT. 2011

- As a behavioral counselor, I provided psycho-educational counseling to at risk adolescents in an academic setting. I created individual behavioral treatment plans for at risk youth and maintained current case notes and documentation in compliance with payee regulations.

GROUP COUNSELOR, Living Waters Counseling Center

JAN. 2010–MAY 2010

- As a group counselor, I facilitated psycho-educational classes to a group of men convicted of domestic violence. I maintained detailed and up to date progress notes, completed initial assessments, as well as discharge reports.

MENTAL HEALTH COUNSELOR, Compass Youth and Family Services

SEPT. 2009–DEC. 2010

- As a mental health support counselor, I counseled and taught independent living skills to at risk adolescents. I participated in multidisciplinary treatment team meetings. I created individual behavioral focused treatment plans for at risk youth.

MENTAL HEALTH COUNSELOR, Keystone Treatment Center

JULY 2008–OCT. 2009

- As a mental health counselor, I facilitated psycho-educational groups for residents (i.e. anger management, personal care, money management, conflict resolution, ect.).

INTERN COUNSELOR, New York University

MAY 2007–AUG. 2007

- As an intern I supervised and counseled a group of children ages 10-11 in a therapeutic summer program. I monitored individual student behavior, as evidence of tracking peer encounters. I independently managed cases for graduating students. I provided behavior reports to clinicians.