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Relationship Between Social Support and Childhood Trauma on Resilience

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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

People who have not overcome childhood trauma and who have developed mental illnesses have difficulties dealing with life challenges. The purpose of this quantitative study used a correlational design to test any relationship between childhood trauma experience levels and resilience against life challenges in adulthood. The theoretical framework used for this study was Barnes' social support theory. Data were collected from 104 participants over a 7-week period. Participants voluntarily answered the ACE questionnaire, 2-way support scale, and resilience scale. Key results indicate that people with mental illness who receive social support are positive impacted by that support. Receiving adequate levels of social support is beneficial for increasing the well-being of people with mental illness. Future research can narrow the focus of childhood trauma by evaluating topics such as experiencing acute trauma, repetitive trauma, and chronic trauma on resilience to cope with life challenges for adults with mental illness. The results of this study have implications for positive social change by highlighting the importance of social support systems for improving the quality of life for people with mental illness. The results can lead to positive social change by demonstrating that people with mental illness benefit when receiving social support.

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Chapter 1: Introduction to the Study

Introduction

Adults who have had childhood traumatic experiences have a greater probability of developing mental illness, chronic medical disorders, drug dependence, and alcohol dependence and experiencing poverty and homelessness with increased life disabilities (Roos et al., 2013). Adults who were diagnosed with a mental illness have a prevalence of childhood physical and sexual trauma ranging from 35% to 57%, and these usually create lifetime disabilities (Butler, 2018; Goodman et al., 1997; Mueser et al., 2004). Roos et al. argued that these lifetime disabilities adversely affect a person's ability to develop and maintain social support relationships.

Adults who experienced childhood trauma usually develop fewer social support relationships and have a greater risk of developing mental health diagnoses such as major depression, dissociation, and posttraumatic stress disorder (PTSD; Etter et al., 2013). Additional negative outcomes frequently included sleep difficulties, eating disorders, obesity, feelings of isolation, poor self-esteem, difficult interpersonal relationships, revictimization, substance trauma, suicidal behavior, history of fire starting, and psychosis (Trickett et al., 2011). Bohnert et al. (2011) reported that adults with a history of childhood trauma usually have greater prevalence of suicidal ideation, homelessness, and illicit drug use.

The intention of this research was to enhance public education and awareness and promote understanding of how adults with histories of childhood trauma are linked to lifetime disabilities if resilience against life challenges is not established. Furthermore,

this research was conducted to expand public understanding that adults who were traumatized as children continue to have long-term consequences that are not easily resolved. Additionally, with this research I sought to promote community dialogues and social change by encouraging a more nuanced understanding of adults with childhood trauma experiences.

Chapter 1 includes the background information, problem statement, and the purpose of the study. There is a research question proposed with appropriate hypotheses presented. The social support theory and framework are clarified. Additionally, this chapter contains the nature of the study, definitions of terms, assumptions, limitations, and the significance of the study. The final topic addressed in Chapter 1 is a discussion of how this research expands the current knowledge the resilience phenomenon for positive social change.

Background of the Problem

Adults with a history of childhood trauma have been linked to an increased prevalence of major depressive disorders. Researchers have found that such disorders include PTSD, increased chronic medical disorders, drug and alcohol dependence, and an increased likelihood of experiencing a low quality of life (Subica, 2013). Buckley (2013) conducted lifetime disability studies and found that adults exposed to childhood trauma often have difficulties developing trust in themselves and others. Buckley also reported that people experiencing difficulties developing trust also have decreased emotional control, increased aggressive actions, and poorly adapted coping skills. People who have not overcome childhood trauma are known for experiencing difficulties in dealing with

life challenges and are therefore vulnerable to many negative life situations. This inability to cope with life challenges is known as *low resilience*.

Experiencing low levels of resilience is a problem for many vulnerable populations such as people with mental illness. Kocalevent et al. (2015) found that symptoms of low resilience among people with mental illness include expressing hopelessness and loneliness and displaying life-threatening behaviors. People with low levels of resilience also lack social connectedness in relationships and often need support and encouragement to increase their well-being. Kocalevent et al. also found that people's well-being is dependent on their levels of resilience, social support, and life satisfaction. These findings indicate that demonstrating resilience is important for everyone. People with low levels of resilience against life challenges often do not have high levels of well-being and satisfaction in their lives; therefore, increasing their resilience is of paramount importance to increase their well-being.

Researchers have established that some people who experience childhood trauma develop mental illness. The nature of exposure to trauma and how people interpret trauma are key factors in overcoming adversity, which is known as *developing resilience* (Masten, 2015). Fernandez et al. (2015) added that resilience is adapting and thriving when challenged by adverse situations without exacerbating mental illness (Connor & Davidson, 2003). Windle (2011) interpreted resilience as a person's multidimensional dynamic ability to adapt to internal or external challenges. Researchers found that in many populations, experiencing positive social supportive relationships is a catalyst for building resilience through an emotional support dimension (Felitti et al., 1998).

In a 2019 study, Zakour tested the resilience theory and found that people identified in a vulnerable population such as those with mental illnesses are less able to recover from disasters in their lives. Resilience was tested when evaluating people on two dimensions: (a) the level of resistance to disasters, and (b) the time it took to recover from the disaster. In general, Zakour (2019) found that people's resilience capacity depends on their level of vulnerability status, level of social support available, their education level, and resources such as income level. Zakour's study was conducted among hurricane survivors, a nonmental health population. There are no available studies on the relationship between the social support theory for increasing resilience for those who experienced childhood traumas and have mental illnesses.

Social support theory was used as an intervention by Lyons (2016) among men 50 years and older who identified as homosexual and experienced psychological distress. This group of men were vulnerable to many outcomes such as loneliness, discrimination, and alienation from family and friends for being homosexual. Lyons found that implementing the principles of social support was effective for increasing psychological resilience through emotional support, tangible support, and creating a sense of belongingness, thereby reducing stress and increasing well-being.

Researchers like Steers (2019) also found that some principles of social support theory were effective among African American adults who experience discrimination frequently, allowing them to build psychological resilience. African American adults are vulnerable to violations of their civil rights, personal safety, and malicious prosecution from rogue elements. Social support dimensions such as belongingness help to lower the

associations of daily discrimination, which often cause psychological strain among African American people (Steers, 2019).

Researchers have studied childhood trauma with a focus on various types of trauma and long-term associations of trauma (Asmundson et al., 2015). Researchers have investigated the associations of childhood trauma, but the focus of this study was on the level of exposure to different amounts of trauma and its association on resilience. Additionally, the research was not about investigating any duration of diagnosis of a mental illness or variations in mental illnesses.

Researchers agree that increasing resilience is an important tool for coping with life challenges that often increases quality of life for people with mental illness (Downs, 2018). Increasing resilience is promising for people with mental illnesses who needed to maintain employment and build effective social support systems, while increasing well-being.

In previous studies, researchers have demonstrated a link between social support theory and increasing or building resilience. The evidence on social support has provided effectiveness in other studies. There have been no studies testing the relationship between social support for building or increasing resilience among people who experienced childhood trauma and have mental illnesses The current study was conducted to determine if social support is also effective for increasing resilience to life challenges for participants who experienced childhood trauma and have mental illness.

Problem Statement

Approximately 250,000,000 Americans report experiencing childhood trauma in their lifetime, which is linked to the development of mental illnesses and poor quality of life for many who have mental illnesses (Centers for Disease Control and Prevent [CDC], 2016; Subica, 2013). People who have not overcome their childhood trauma and who develop mental illnesses have difficulties when dealing with life challenges, which causes vulnerability to many negative life situations and poor quality of life (Buckley, 2013). Zakour (2019) argued that increasing resilience is useful for people identified in such vulnerable populations when managing or recovering from disasters in their lives. Increasing resilience is beneficial for people when increasing well-being, quality of life, and abilities in coping with life challenges. This variable however still needs testing among people with mental illness.

Several researchers have identified social support as a key component for building resilience in nonmental-health populations and found that dimensions of social support were effective for increasing such resilience (Lyons, 2016; Steers, 2019; Zakour, 2019). Studying the effectiveness of social support for building resilience promised similar theoretical effectiveness among vulnerable mental health populations. The general problem is that researchers in the field of psychology remain limited in their understanding of the efficacy of social support for positively contributing to resilience against life challenges for vulnerable populations. The specific problem addressed in this study was the lack of understanding regarding the relationship between social support, childhood trauma experiences, and resilience against life challenges for people with

mental illnesses. This problem is a gap in the literature as there are no studies addressing this issue, making the study of paramount importance in the psychology discipline.

Purpose of Study

The purpose of conducting this quantitative correlational study was to demonstrate the relationship among adults diagnosed with mental illness who may have experienced childhood trauma to determine if social support influences their resilience. The independent variable was levels of childhood trauma and was measured using the adverse childhood trauma experiences instrument. The dependent variable was social support and was measured using the two-way support instrument. Social support and childhood trauma were used in this study to determine if these variables had any association to resilience. The dependent variable was resilience against current life challenges measured using the resilience scale. Covariates in this study included age measured in years; gender measured as female, male, or other; education measured by levels of education completed; and employment status as employed, unemployed, or volunteer.

Research Question and Hypotheses

RQ: To what extent do childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) predict resilience against life challenges in adults with mental illness?

H_0: Childhood trauma experience, social support, and demographics (age, gender, education level, and employment) do not predict resilience against life challenges in adults with mental illness, and all beta values were equal to zero ($\beta = 0$).

H_a: Childhood trauma experience, social support, and demographics (age, gender, education level, and employment) do predict resilience against life challenges in adults with mental illness, and not all beta values were equal to zero ($\beta \neq 0$).

Theoretical Framework

The theoretical framework used for this study was the social support theory developed by Barnes (1954). Barnes' research was initially conducted for understanding the associations of social support among friends and neighbors in small villages during life challenges. Barnes defined *social support* as social relationships in which patterns of understanding developed among people. There were four dimensions to social support: (a) belongingness, (b) emotional, (c) tangible, and (d) spiritual. In this study, I used three of the four dimensions; the spiritual dimension of social support was not included.

According to Barnes (1954), belongingness support is being a member of a group with feelings of acceptance from the group. Emotional support (psychosocial support) is the care and comfort people experience from a group, which results in increased self-esteem and feelings of appreciation. Tangible support is the physical and moral support of care people receive from social groups, family, or friends, such as housing, money, food, or personal care. Together these three dimensions comprise the social support theory for the current study. Barnes argued that receiving this type of social support usually confirms to people with mental illnesses that others care for them and that there a source of comfort is available to them.

Several studies have solidified the efficacy of social support theory. For instance, Albrecht and Adelman (1987) and Uchino (2004) found evidence that positive social

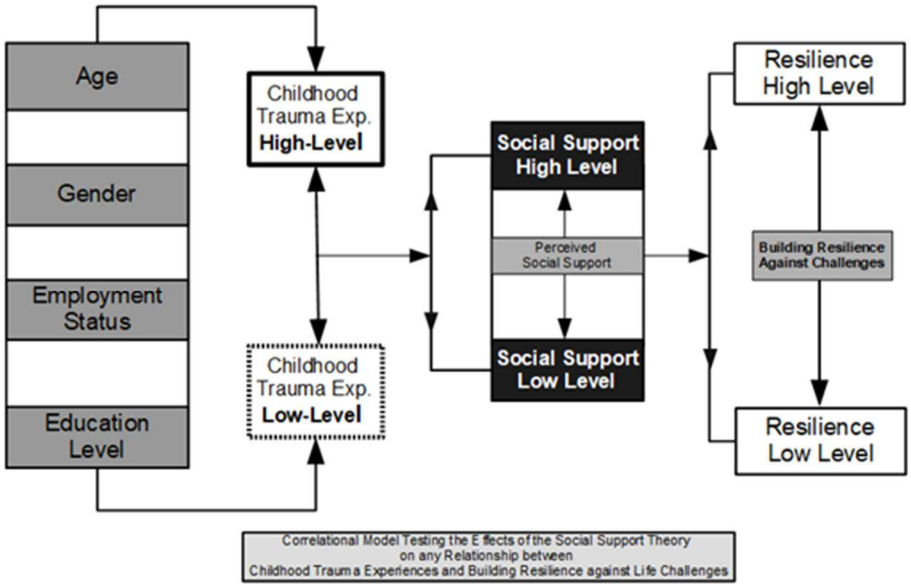
support usually improves a person's health, self-acceptance, and esteem. Other researchers (Lakey & Cronin, 2008; Sarason et al., 2001) found that receiving positive social support leads to improved mental health, positive emotions, lower stress, and higher self-esteem among mental health patients. Thoits (2014) also provided evidence that effective social support helps in decreasing a person's isolation while providing a sense of companionship and belonging.

Goetz (2017) effectively used social support theory in a study that included underserved persons in the western United States. The researcher found that the development of social support systems with social workers provides a bridge to receiving needed services. Researchers found that social support systems usually lessen the associations of traumatic experiences by acting as a stress buffer, which usually decreases psychological distress and somatic health complaints (Boen et al., 2012).

The graph in Figure 1 depicts a theoretical model for testing the social support theory in the current study. The model was for testing if people who experience levels of childhood trauma also receive levels of social support experience increased resilience against life challenges among people with mental illness. The demographics were to determine if there were differences in resilience against life challenges controlling for age, gender, education level, and employment status. Previous studies indicated that social support theory is an effective intervention for people with mental illness due to childhood trauma experience. Testing this model was for determining the efficacy of the social support theory among adults who experienced of childhood trauma and developed mental illness.

Figure 1

A Model Testing the Efficacy of the Social Support Theory



Note. Adapted from "A Concurrent Examination of Protective Factors Associated With Resilience and Posttraumatic Growth Following Childhood Victimization," by L. M. Schaefer, K. H. Howell, L. E. Schwartz, J. S. Bottomley, and C. B. Crossnine, 2018.

The theoretical model was also particularly useful for understanding the associations of social support on any relationships with resilience. For example, if a participant of a given age, gender, employment status, and education level who experienced childhood trauma and received social support was able to increase resilience. More details about testing this model are in Chapter 3.

Nature of the Study

Conducting the current study required using a correlational design for testing the predictive relationship between the independent variable, the theory variable, and control variables on the dependent variable. Three designs are available when using a

quantitative methodology: the quasi-experimental design, the true experimental design, and the correlational design. I did not use the quasi-experimental design or the true experimental design because these designs required assessing the effectiveness of an intervention. The true experimental design requires randomization of participants to groups; the quasi-experimental design does not require such measures, but neither of these designs were applicable to the current study (Marcus-Varwijk et al., 2018).

The benefit of using a correlational design was to determine if predictor variables have a relationship with the stated dependent variable (Nelson et al., 2016). Data are usually collected from large groups, such as persons with mental illness and childhood trauma experiences. Because neither the quasi-experimental nor the true experimental designs were plausible, using the correlational design was well-suited for this study.

The independent variable for this study was child trauma experience levels, defined as experiencing physical, emotional, and sexual abuse while under the age of 18. The dependent variable for this study was resilience against life challenges. Resilience means having abilities for coping with life challenges without developing mental illness (Connor & Davidson, 2003). Control variables, such as age, gender, education level, and employment status, are covariates when assessing the relationship between the independent variable and the dependent variable.

The research methodology for this study required collecting samples from a Midwest metropolitan outpatient mental health clinic. The participants for this study were clients who were established patients of an outpatient clinic who had been diagnosed with at least one mental illness and were at least 18 years old. Data were collected using a

convenience method and by administering a paper survey on the grounds of the clinic. Data analysis was done using the Statistical Package for Social Science (SPSS) application.

Definition of Key Terms

Childhood trauma experience levels: A negative emotional response experienced by a person under 18 years of age to an unanticipated and startling negative experience. The experience usually includes life events such as negative threats or unexpected death (American Psychiatric Association [APA], 2013). Other researchers such as Felitti et al. (1998) operationally define *childhood trauma* as negative physical, emotional, sexual, or psychological experiences, which usually include physical, medical, neglect, inadequate supervision, and exposure to violent environments. For this study, childhood trauma experience level was defined as experiencing neglect, physical, emotional, or sexual abuse before the age of 18.

Levels of perceived social support: The number and quality of relationships deemed important to a person's well-being (Miller, 2003). Sarason et al. (1990) defined *perceived social support* as a collection of feelings people experience when they perceive they are loved, appreciated, valued, and unconditionally accepted. For this study, perceived social support was defined as experiencing emotional support, material support, or behavioral guidance. Guidance was usually in the form of feedback during positive interactions with one or more persons.

Mental illness: A psychological health condition that usually involves changes in a person's thinking, behaviors, and emotions or a combination of these (APA, 2019).

Mental illness is a clinically significant behavioral or psychological syndrome that affects people. The illness is associated with perceived or real distress, an increased risk of experiencing perceived pain, disability, or a perceived or real risk of death (Stein et al., 2010). Mental illness for this research was operationally defined as a psychological syndrome among people with any psychological illness or disorder; whereas such illnesses or disorders were diagnosed and being treated by a qualified mental health professional.

Mental health diagnosis: An illness that causes major depression, dissociation, anxiety, mood disorders, PTSD, drug use disorder, and alcohol use disorder (Etter et al., 2013). The operational definition of *mental health diagnosis* is psychological illness. These illnesses include depression, dissociation, anxiety, mood disorders, PTSD, drug use disorder, and alcohol use disorder.

Mental illness control: A client appearing stable behaviorally and psychologically and experiencing no evidence of perceived or real distress; clients not experiencing perceived or real pain, disability, or real or perceived fear of death (Stein et al., 2010). Mental illness control was operationally defined as clients who had no real or perceived visible or audible signs of distress or disability that affect normal human functioning.

Resilience against life challenges: People's ability to endure life stressors or challenges without triggering mental health episodes (Connor & Davidson, 2003). Masten et al. (2006) defined resilience as an individual's ability to endure life adversities and allow positive life adjustments and adaptations without triggering a mental episode. For this study, resilience against life challenges was defined as overcoming obstacles

such as childhood traumas without negatively affecting stability or trigging bouts of mental health episodes.

Assumptions, Limitations, and Delimitations

Assumptions

The first assumption in this study was that participants would have experienced some level of childhood trauma. The second assumption was that participants would have been diagnosed with at least one mental illness, and their illness was under control during the time of the study. The third assumption was that participants who participated in this study would not have had unusual levels of stress would not have become unstable when taking the survey. The fourth assumption was that participants would convey the true nature of their childhood trauma experience levels, levels of perceived social support, and resilience against life challenges when taking the survey. These assumptions were mitigated by collecting data from a large enough sample size to reduce any negative outcomes in this study.

Limitations

There were several limitations when this study was conducted. The first limitation was that data was collected using the convenience sampling method. Using the convenience method meant that some participants could have experienced bouts or severity of illnesses had precluded them from completing in study. This situation would have likely reduced the number of participants available for the study and may have affected generalization of results to the population. The study would continue as long as

necessary so that an adequate number of participants participated and completed the study.

In addition, a limitation of this study was that participants' level of mental illness, although seemingly under control, may have influenced participants' answers. This therefore meant that not all responses were reliable, which could have resulted in unreliable data. Mitigating for these limitations required collecting data from a large enough sample size that mitigated any negative associations to erroneous data, thereby allowing generalization of study results to the population.

Delimitations

This research study included clients from outpatient metropolitan community mental health clinics in the midwestern United States. All clients had at least one mental health diagnosis that was under control at the time of the study. All participants had to be 18 years or older and had to be able to read, write, and understand the English language well enough to take the survey.

Scope of the Study

Conducting this study did not include participants who were not clients of the specified Midwestern outpatient mental health clinic. This study did not include people younger than 18 years or clients whose mental illness was not under control or of a severity such that they could not read, write, or comprehend the survey without causing further stress or trauma.

Significance of the Study

The results of this study are significant for validating the long-term consequences of childhood trauma among adults. The results are also significant for determining reliance outcomes for people with mental illness disabilities. The results of this study are useful for identifying and making connections between the severity of childhood trauma experience levels, levels of perceived social support, on resilience against life challenges. Identifying these connections is beneficial for enhancing education and awareness of the associations of childhood trauma experiences among adults.

These results thereby will be useful when promoting understanding within communities. Results such as these are efficacious for promoting community dialogue, removing shame among victims, and promoting a productive life among victims of childhood trauma. The results are also beneficial for closing a gap in the current literature and are useful for understanding resilience phenomena as affected by childhood trauma experiences.

Implications for Positive Social Change

The results of this study promote positive social change by increasing awareness among researchers, practitioners, and the general public on the plight of people with mental illnesses who also experienced childhood trauma. Results from this type of study will be helpful to researchers by providing factors associated with resilience to life stressors and how people react during social supportive relationships. This study also supports positive social change by promoting advocates for adult victims of childhood trauma in local, national, and global communities.

Summary

This study is focused on the association between childhood trauma experiences and resilience against life challenges for people with mental illnesses. In the background section of this chapter, I discussed the development of issues for people who experienced childhood trauma. For instance, people who experienced difficulties developing trust also have decreased emotional control, increased aggressive actions, and poorly adapted coping skills. Some arguments have centered around adults with a history of childhood trauma experience, which has been linked to an increased prevalence of major depressive disorders, PTSD, increased chronic medical disorders, drugs, and alcohol dependence. Past researchers have looked at childhood trauma experience, but there are no studies in which researchers focused on the associations of perceived social support, which was a type of relationship for promoting resilience against life challenge for people with mental illness, who experienced childhood trauma.

In the problem statement, I outlined the specific problem addressed in this study, which was to understand the association of childhood trauma on resilience against life challenges for people with mental illnesses. Conducting this study was necessary to close a gap in the current literature. In the purpose statement, I introduced the design requirements for the study, which was a correlational design. This design allowed testing any relationship among variables with resilience.

The theoretical foundation of the study was social support theory, which was initially developed by Barnes (1954). The major proposition of the theory was that social relationships developed reliable social patterns of dependability for people who need

these types of relationships in their lives. These patterns are that supporters provide comfort by physical touch such as a pat on the shoulder or verbal communication such as kind words that recipients perceive as kindness. A graph in Figure 1 provided a graphic explanation of the role and function of the theoretical frame in the current study.

In the nature of the study, arguments were used when promoting the use of the correlational design instead in this quantitative study. The correlational design was chosen because there was no intervention used for the study. Subsequent sections included the assumptions, limitations, delimitations, and scope of the study. These sections were important because arguments provided narrowed direction for conducting the study by providing requirements for being in the study and determining inclusion and exclusion factors for the study.

Finally, in the significance of the study section, I presented arguments on the benefits of conducting the current study. These benefits include providing new knowledge to the psychology discipline, closing a gap in the literature, and benefits to promoting positive social change. Conducting this study is of major benefit to understanding how factors such as childhood trauma experience and social support affect resilience for people with mental health disorders. Studies like these continue to be relevant to the psychology discipline and the academic community at large. Following is a review of the current literature in Chapter 2.

Chapter 2: Literature Review

Introduction

An estimated 250,000,000 Americans have experienced childhood trauma in their lifetime (CDC, 2016). Researchers have found that adults with moderate to severe childhood trauma levels experience increased prevalence of mental illnesses (Felitti & Anda, 2010; Zarse et al., 2019). These outcomes include greater lifetime disabilities, delays in personality development, difficulty trusting others, and maladaptive coping skills. The general problem is that researchers and practitioners of psychology remain limited in their understanding of how childhood trauma and social support affect resilience against life challenges for people who experienced childhood trauma. The specific problem addressed in this study was understanding the association of childhood trauma experiences on resilience against life challenges for people with mental illnesses. Currently, there have been no studies that address this phenomenon, which caused a gap in the literature and made conducting this study of paramount importance in the psychology discipline.

The purpose of this quantitative study was to test the relationship of social support on the relationship between childhood trauma experience levels and resilience against life challenges for people with mental illnesses. Childhood trauma was measured using the adverse childhood trauma experiences instrument. Support system theory was the foundation for measuring social support with the social support instrument, and resilience against life challenges was measured using the resilience test instrument. Experiences of childhood trauma was the independent variable. Resilience against life challenges was the

dependent variable. Covariates in this study included age, measured in years for people 18 years and older; gender measured as female, male, or other; education measured by education level completed; and employment status measured as employed, unemployed, of volunteer.

The literature has shown strong evidence that adults who experienced childhood trauma have a greater probability of developing mental illnesses and chronic medical diagnoses (Zarse et al., 2019). These diagnoses include alcohol and drug dependence, illicit drug abuse, and suicide ideation—all of which can result in poverty and/or homelessness without proper intervention. Chronic medical problems including obesity, drug-related illnesses, alcohol-related illnesses, or other substance use illnesses increase chronic medical care needs and risk for depression and PTSD (Zarse et al.).

Some researchers have found premature death to be a strong probability for people who experienced childhood trauma (Butler et al., 2018 & Felitti et al., 1998). Homelessness has been attributed to limited educational attainment, underdeveloped coping skills, and decreased socialization skills that limit employment and educational opportunities. Limited work skills due to reduced education, increased isolation, and increased legal histories have also been attributed to homelessness (Montgomery et al., 2013). Together, these factors demonstrate that childhood trauma is an effective conduit for developing mental illnesses, which then result in a poor quality of life for people with mental illnesses who do not receive proper interventions. Following is a preview of the major sections of the literature review.

Chapter 2 begins with the search strategy used for finding suitable literature for each variable in this study. A discussion of the social support theory follows in which I discuss the principles of social support such as belongingness and affectionate support, emotional support, and tangible support. Following these discussions, I provide discussions on mental illness beginning with a history of mental illnesses. These discussions are particularly helpful for understanding the population under study. Further, I provide arguments on diagnosing mental illnesses in people that was based on the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) standards in the United States. In this section, I also provide discussions on subcategories of mental illnesses, such as anxiety disorder, major depressive disorders, PTSD, and bipolar disorder and related treatment of these disorders.

Following are discussions of the dependent variable in this study, which is resilience. In this section, I provide discussions on what resilience means and how people develop resilience. I then present arguments from existing literature on relationships found between social support and resilience in other populations. These arguments open discussions on childhood trauma with a detailed discussion on the associations of childhood trauma among populations. I consequently provide discussions on the associations of social support on childhood trauma in the population. These arguments lead to discussions on the associations of childhood trauma and the development of mental illnesses in certain populations. I follow up with a discussion on the literature on childhood trauma, resilience, and social support. I end this chapter with a discussion on

demographic variables used in this study related to resilience for different kinds of populations. After the summary section of the literature, I introduce Chapter 3.

Literature Search Strategies

The literature search strategy was used for examining sources of current research from the EBSCO database. The EBSCO database includes multiple databases related to psychology, such as CINAHL and PsycINFO, which include full-text articles from journals published by the American Psychological Association (PsycArticles) and Medical Literature Analysis and Retrieval System Online (Medline). All studies and articles were reviewed to determine possible research gaps prior to this study. Additionally, I reviewed recent dissertation studies from the ProQuest thesis and dissertation database for local, national, and global information on mental illnesses, social support theory, childhood trauma, and resilience.

I began the literature search using key search terms that included key words, Boolean phrases, and indexed terms. Some of these words, phrases, or indexed terms included *adult trauma, adult trauma and social support, adult trauma and resilience, anxiety, anxiety and childhood trauma, anxiety and resilience, anxiety and major depressive disorder(MDD), anxiety and PTSD, anxiety and social support, anxiety disorder (AD), MDD, and PTSD, belongingness, childhood trauma, childhood trauma and anxiety, childhood trauma and mental illness, childhood trauma and resilience, childhood trauma and social support, childhood sexual trauma, childhood physical trauma, childhood emotional trauma, emotional support, generalized anxiety disorder, instrumental support, MDD, MDD and anxiety, mental illness, PTSD, physical support,*

psychosocial support, social support, support, perceived support, resilience, resilience and social support, resilience and childhood trauma), social support theory, and *tangible support*. No journal articles from 2000 to present were found that combined the terms *childhood trauma, social support*, and *resilience*.

The scope of the literature review included worldwide long-term consequences of childhood trauma addressed in over 100 research articles published from 1987 to 2020 with a greater portion of these articles within the last 5 years. The publication dates for the reviewed literature were between 1954 and 2020. Older research articles before 2015 were examined for relevance in the establishment of childhood trauma. Journal articles greater than 5 years were included in this research if considered historically significant.

Conducting a search of the current literature was successful for uncovering key and relevant information on topics associated with this study. After reviewing hundreds of scholarly and peer-reviewed articles, books, related industry material, and industry and government websites, I was able to find suitable evidence that the resilience phenomenon exists and that filling this gap in the literature would be beneficial. Following is a discussion of social support theory, which was foundational for this study.

Theoretical Framework

Social Support Theory

The following discussion is on the principles of the social support theory used in this study. In 1994, Cullen combined Barnes' (1954) theory of belongingness and Durkheim's (1954) theory of social solidarity thus creating a new social support theory. This new theory emerged from the works of these previous authors and created a social

support theory with four main principles that included: (a) belongingness/affectionate support, (b) emotional support, (c) tangible/physical support, and (d) spiritual support (Levine et al., 2015). The first three levels of social support are included in the following discussions. Spiritual support was outside the scope of this study and therefore is not included as part of the levels of support in this study. The first principle discussed is the principle of belongingness/affectionate support.

Belongingness/Affectionate Support Principle

Researchers have argued that belongingness is a type of social support that occurs among group members that provides members with feelings of acceptance or approval within the group (Gopikumar et al. 2019). Gopikumar et al. (2019) reported that people within social networks have mutual goals and obligations and provide each other with a sense of belongingness and feeling loved, valued, and cared for in their relationship. These social affiliations are key to a recipient's recovery and emotional security when a member of the social group experiences mental illness exacerbations.

Other researchers, such as Begun et al. (2018), studied belongingness among homeless young people who were between ages 18 to 24 years, in the midwestern and western areas of the United States. Begun et al. found that when young people were provided with a social base that included positive social support through social connectedness, they developed social connections and reported gaining feelings of control of their life challenges. These researchers found that when young people were not socially connected and did not develop belongingness, they frequently reported signs of mental illness such as depression.

Recent studies have indicated that not having a sense of belonging to an identified social group has similar effects among bicultural and biracial college students. For instance, Albuja et al. (2019) studied social disconnection and lack of belongingness among bicultural and biracial undergraduate college students. Students reported that bicultural and biracial paternity lowered their sense of belonging to either the maternal or paternal family members. Albuja et al. argued that social belonging is a fundamental human need and is a key component for maintained well-being. The results of this study suggest that being denied belonging to an identified group such as an important family identity can lead to feelings of rejection as well as depression. Although the researchers found that college students desired social connections with their biological families and reported depression when there was a disconnection, the effects of belongingness on resilience were not part of the study.

The phenomenon of a lack of belongingness has also been felt among U.S. service members when experiencing feelings of rejection by other military service members. In 2017, Hom et al. studied U.S. military service members and veterans who did not have a sense of belongingness within their unit. These researchers found that when members perceived separation from their unit, their behavior created a burden to the rest of the unit. Hom et al. argued that behaviors related to this sense of burden increase these members' risk for developing depression, insomnia, and frequently suicide. These service members experienced suicidal ideation (the belief that one's death was worth more than one's life) from perceived burdensomeness.

Several researchers have demonstrated the effectiveness of the belongingness principle of social support. While researchers focused on belongingness as part of the social support theory among people with mental illness, there have been no connections to resilience, which demonstrates a gap in the research. Further, although some researchers have discussed belongingness among people with mental illness, there have been no studies on the effectiveness of social support for building resilience among people who experienced childhood trauma.

Emotional Support Principle

McCarthy et al. (2019) defined emotional support as expressions of comfort and caring in a social support group, which strengthened the recipient's confidence or self-esteem. The term *psychosocial support* was used interchangeably with *emotional support* in some studies; these terms had the same meaning (Ure, 2018). For this study, the term *emotional support* also meant *psychosocial support*. McCarthy et al. argued that emotional social support is beneficial for building emotional connections between individuals, family, and friends that perpetuate feelings of acceptance in a social group. Pearlin et al. (1981) suggested that emotional support provides protection from negative outcomes of stress among individuals and helps people develop their resilience and self-efficacy.

McCarthy et al. (2019) discussed the importance of mothers who provide their children with emotional support after the children have been sexually assaulted. When children are supported, these children develop abilities such as coping with emotions of fear, anger, and depression. Researchers found that caregivers who provide children with

emotional support following sexual assault decreased the development of anger, depression, and anxiety among children (Wamser-Nanney, 2017). These researchers identified the emotional support principle as imperative to the recovery and prevention of mental illness in children; however, long-term development of resilience has not been attributed as a long-term outcome.

Some researchers studied the associations of the emotional support principal among older prisoners on medical and psychological outcomes. Noujaim et al. (2019) studied (N = 140) prisoners that were ≥ 50 years of age and diagnosed with chronic medical illness. Among older prisoners with chronic illness, higher emotional support, particularly from clinicians, was associated with lower likelihood of low self-efficacy; prisoners who relied on other prisoners for emotional support were associated with low health-related self-efficacy. This study demonstrated the efficacy of emotional support for increased medical and psychological outcomes among people without mental illness.

Researchers found that emotional support was effective among people who did not have mental health issues but needed support for medical compliance. Cook et al. (2018) reviewed the role of emotional support in men diagnosed with human immunodeficiency virus (HIV). These researchers discovered that men diagnosed as HIV-positive who lacked emotional support frequently failed at engaging or complying with medical care, which could lead to fatality. The researchers found that patients recently diagnosed with HIV who attended HIV positive support groups or received emotional support remained in treatment. Cook et al. argued that emotional support also

includes physical touching (holding the patient's hand), which provides patients with assurances of commitment to patient treatment engagement.

In summary, researchers defined emotional support or psychosocial support as showing comfort and care to others. Researchers argued that this type of support is beneficial for creating emotional connections between individuals or groups. Some of the benefits of emotional support is protection from negative outcomes related to stress and is beneficial for increasing people's resilience and self-efficacy. Researchers often focused on the benefits of emotional support among groups like mothers with children who experienced childhood trauma, but researchers did not focus on the association of emotional support among adults who experienced childhood trauma.

Other groups who benefit from using the emotional support principle included middle aged to older prisoners on medical outcomes. Researchers found emotional support is effective for increased self-efficacy and increased medical and psychological outcomes when mental illness is not a factor. People diagnosed as HIV-positive also experienced greater medical treatment adherence when they received emotional support. These studies provided support for the emotional support principle related to social support; however, there were no available studies on the effectiveness of emotional support for adults who experienced mental illness and childhood trauma.

Tangible/Physical Support Principle

While other family members or friends provide emotional support to patients, their family members provide care. Researchers found that tangible or physical support by family members is limited by their personal relationship and comfort level with the

patient. Study results suggest that family members provide physical/tangible support that helps people when normalizing their lives after a major life illness who did not have a diagnosed mental illness. Providing tangible support among people who are not physically challenged but needed support to regulate their lives is also important. In a 2019 study, Mowen et al. observed the effects of family support among convicted felons (N = 1002) who were released into society after a prison sentence but were not diagnosed with mental illness. These researchers addressed the recovery and success of serious and violent offenders when family provided physical/tangible support after a prison sentence. The results showed that family member support of ex-prisoners with guidance, housing, and transportation had a small effect, but significant, which led to ex-prisoners avoiding recidivism (R = .04).

In contrast, those prisoners who had not received family support had high rates of recidivism. According to Mowen et al. (2019) when ex-prisoners did not re-offend, this was an indication of the effectiveness of family support for the basic needs of ex-prisoners returned to a life outside of prison. Instrumental familial support mechanisms such as housing and financial support appear more salient and promote prosocial reentry outcomes more so than mechanisms of emotional or interactional support. Physical/tangible support was significant to reentry into life for these ex-prisoners who were not diagnosed with mental illness.

Receiving physical or tangible support also frequently led to increased resistance to or feared failure among people who were not known to have mental illness. Failing to receive such support, however, often led to depression, anxiety, and other mental health

disorders (Bishop, 2017). In 2017, Bishop also found that lawyers who experienced high levels of fear of failure and had a need to be perfect often developed this fear of failure phenomenon. The study indicated that when people did not receive support, such as social support, this situation often led to development of fear of failure at life challenges also known as low resilience.

Mental Illness Without Physical Support

People who had not received adequate social support such as physical support were at risk of developing psychological disorders such as suicide ideation. These arguments showed the relevance of social support among people with psychological disabilities in addition to having a mental illness diagnosis. Researchers discovered that adults with autism spectrum disorders (ASD) were at high risk of self-injury and suicidality (Camm-Crosbie, et al, 2019). The effects of people who did not received social support was demonstrated in a United Kingdom online survey among this sample people with ASD and mental illness but also retained mental capacity to participate in the study. The sample consisted of (N = 200) autistic adults who included women (n = 123) and men (n = 77) between the age of 18 and 67 years old. The average age in the study was around 40 years old (M = 38.9, SD = 11.5), indicated that 66% of all participants were between 18 years and 50 years old. The researchers argued that approximately 90% of participants in this study with ASD often struggled with receiving inadequate treatment for their diagnoses, which led to received low levels of physical support.

Mental illness providers often prescribed inadequate treatment and often believed that when patients were fully treated for mental illnesses, they were also fully treated for

ASD. Those providing mental health care for people with ASD often determined that these patients once treated would not need physical support, which led to patient neglect. The situation had a negative outcome because, when there were no or low levels of support to ASD patients, this often resulted in increased thoughts of suicide ideation (Camm-Crosbie, et al., 2019).

The survey provided insights into individuals' experiences of the need for social support as part of psychiatric care. The analysis resulted in three underlying themes: (a) difficulties in accessing treatment and support, (b) lack of understanding and knowledge of autistic people with co-occurring mental health difficulties, and (c) appropriate treatment and support, or lack of, often affected people's well-being and likelihood of possibly experiencing suicide as their future. Findings demonstrated an urgent need for social support for people with ASD and mental illness as treatment pathways in mental health services.

Physical Support and Childhood Trauma Without Mental Illness

Children who experienced adverse childhood experiences but did not develop mental illness also benefitted from received physical support. In 2018, Sciaraffa et al. studied children with adverse childhood experiences (ACE) and found that these children required having a safe environment with good nutrition and predictable schedules to become resilient and prevented mental illness. Brofenbrenner (2005) also posited similar arguments, which continues supporting that children needed physical support.

Brofenbrenner (2005) also added that children with ACE, needed one adult who deeply cared for them and willingly provided physical as well as emotional support. The

researcher argued that there were basic principles of caring for traumatized children who did not develop mental illness. These principles included ensuring a physically and emotionally safe environment, developing dependable, consistent, safe adults, and predictable classroom structure (routines). This environment ensured that children would develop skills and competencies for buffering the outcomes of stress and trauma, and not developing mental illness.

Physical Support Among Adults with Childhood Trauma and Mental Illness

Children who often experienced adverse conditions also known as children trauma often developed mental illness in adulthood (Rossiter et al., 2015). Participants (N = 129) who attended an adult mental health clinic were evaluated for the presence of mental health disorders, impulsivity, symptom severity and disability. Approximately (77%) of clients reported experiencing childhood trauma, but there was a significant difference in the reporting of these experiences by clinicians ($p < .001$). The results showed that reports of experiences were only noted 38% of the time. Documentation of these childhood trauma experiences included several types of experiences such as emotional neglect (62% vs. 13.2%), physical neglect (48.1% vs. 5.4%) and sexual trauma (24.8% vs. 8.5%). The results indicated that when clinicians did not adequately acknowledge childhood trauma experiences among clients, there was increased severity of symptoms such as psychopathology and personality disorders.

When people did not receive social support such as physical support when diagnosed with mental illness, there was a greater risk of catastrophic outcomes such as suicide ideation. According to Watkins and Hill (2018), when people did not receive

social support, there was little protection against the development of mental health issues and increased risk of suicide. The study showed that a lack of social support was correlated with experiences of isolation and loneliness, which was disastrous among people with mental illness.

Tangible or physical support was shown to have practical implications for people of various groups such as those with mental illnesses, those with medical conditions, or people reintegrated to society. There were limited studies on the benefits of physical/tangible support by people outside of family members for adults with mental illness and experienced childhood trauma. Researchers have demonstrated that social support was usually provided by societal groups such as family, friends, and other social outlets.

People who needed support that did not get support often reverted to previous behaviors such as ex-offenders recidivating. Children are some of the biggest benefactors of physical support because those who experienced adverse experiences were able to defend against developing mental illnesses after received physical support from adults. Children were defended against negative outcomes and developed competencies for building resilience that would serve them well as adults.

The three principles of social support discussed within this study included belongingness/affectionate support, emotional support, and tangible/physical support. Arguments in this section were focused on each principle related to social support among people with mental illness. Researchers demonstrated the benefits of the belongingness principle of social support among people with mental illness, but this research was unable

to determine persons who were exposed to childhood trauma developed resilience. While emotional support was effective among adults, the effectiveness of emotional support with mental illness and childhood trauma was established. Physical support effectively increased resilience among persons while persons who did not receiving physical support developed mental illnesses.

Researchers have provided strong evidence that children who experienced adverse childhood trauma benefitted from adult physical support in not developing mental illnesses. Researchers provided a firm support of the benefit of the social support theory; however, there remains a gap in the literature on the association of support on the relationship between childhood trauma and resilience for people with mental illness.

Literature Review

History of Mental Illness

The first evidence of mental illness was recorded among Mesopotamians and Egyptians in 1900 BC, which, attributed women's mental illness to a wandering uterus (Miles, 2018). Egyptians and Greeks identified this phenomenon as hysteria and treatment required the use of strong smelling substances to coax the uterus to return to the correct position thus correcting the mental illness known as hysteria.

By 400 BC, the Greeks placed their trust in physicians such as Hippocrates to cure physical and mental illness (Miles, 2018). Hippocrates believed that illnesses were caused by imbalances of humors or body fluids and referred to this as humorism. To correct the humorism, required the rebalancing of blood, yellow bile, black bile, and

phlegm to promote wellness. These same humorism beliefs continued into the 19th century.

Later in the development of mental illness, Europeans believed during the 11th and 15th centuries that the cause of mental illness, disasters, or plagues were caused by the devil or supernatural forces (Miles, 2018). The supernatural forces were caused by an evil or demonic possession, sin, curses, or the gods were displeased with humans. According to Miles (2018), it was also common in the 13th century for persons who were shown evidence of mental illness to be accused of being a witch and burned at the stake. The beliefs in superstition, astrology, and alchemy gained popularity as mental illness preventions.

During that same time, The Hebrew people believed mental illness was a punishment from God for evil actions and required the repentance of sins (Miles, 2018). Repentance of sins included attending religious healing ceremonies and regular services, prayers, touching relics, confession of the sin, and incantations to appease the gods for forgiveness that would then provide healing (Miles, 2018). The belief of repenting of sins has continued to gain credence for some religions to this day.

In the 16th century, the establishment of mental hospitals and asylums were created to protect society from the persons diagnosed with mental illness (Miles, 2018). Doctors and society, believed persons who had mental illness, were prone to violence, had no ability to reason, were unable to experience pain or cold and were frequently referred as animals. Practitioners believed that beating, threatening, or instilling fear

would restore the mind in persons who were mentally ill. Additional treatments included causing the person to purge, vomit, or bleed as in humorism, to restore mental sanity.

In the 17th century physicians, by the name of Dr. Weyer and Dr. Scot argued that mental illness was caused by a metabolism illness (Miles, 2018). The physicians attempted to educate the public that persons with mental illness were not demon possession or witches. During that period however, the Roman Catholic Church's received compensation for the performance of exorcism of evil spirits services and banned writings that proclaimed mental illness as a metabolic related illness. Banning the beliefs perpetuated witch hunting through the 17th and early 18th centuries. In the Western world, researchers estimated that greater than 100,000 persons were accused of being a witch and condemned to burn at the stake (Schoeneman, 1977).

By the late 18th century, physicians by the name of Dr. Vincenzo Chiarughi and Dr. Philippe Pinel, visited the asylums and removed the chains of patients who they believed were mentally ill. Dr. Chiarughi and Dr. Pinel encouraged that treatment for mental illness to include improved hygiene and increased activity (Micale, 1985). According to Bell (1980), a psychologist by the name of Dr. William Tuke began the humanitarian mental illness reform in England and created health retreats to provide the patients with dignity, kindness, and therapeutic physical work, to promote wellness.

In the late 18th century and throughout the 19th century, European psychiatry struggled and attempted to differentiate if mental illness was attributed to a somatogenic or psychogenic cause (Miles, 2018). For instance, hysteria caused physical symptoms such as blindness or paralysis but no apparent physiological explanation. Physicians

attributed hysteria to universal imbalances of magnetic fluid and James Braid purposed mesmerism (hypnosis) as a psychogenic treatment for mental illness symptoms. In contrast, a neurologist by the name of Jean-Martin Charcot, believed hysteria was a neurological condition (Forrest, 1999). Forrest found that in the early 20th century, doctors by the name of Dr. Josef Breuer and Dr. Sigmund Freud believed hysteria should be treated with hypnosis also known as the cathartic method (psychoanalysis).

Although the cause of mental illnesses traveled a winding path with varied beliefs; in the 21st century, the biopsychosocial model emerged (Miles, 2018). The biopsychosocial model encompassed the belief that mental illness had many origins. The origins of mental illnesses included genetic predispositions, exposures to psychological stressors, problematic interpersonal relationships, and contributed factors related to sociocultural factors such as poverty and poor living conditions.

In summary, mental illness was attributed throughout history to three main etiologies. These etiologies were accredited to supernatural (devil, witches), somatogenic (genetic or brain injury) and psychogenic (mind or psychiatric) causes (Miles, 2018). Many beliefs with a range of treatments were based on the causes of mental illness. Many persons believed to have mental illness experienced gruesome deaths with little treatment. This overview provided a history of mental illnesses beliefs and treatments with limited to no recovery for that person. The 21st century has approached mental illness treatment in a combination of somatogenic and psychogenic approaches. The focus of the next section was on common mental illnesses and present treatment options.

Mental Illness Diagnoses

In the field of medicine, all professionals committed to do no harm to patients when patients were treated of either medical or mental illnesses. This commitment originated with a scholar named Hippocrates of Kos, commonly known as the father of Western medicine, sometime between the years 500c - 460c. The scholar recognized mental illnesses as distinct symptomologies and a subcategory of the medical field (Miles, 2018). In the U.S., the American Psychiatric Association (APA) (1952) was the body charged with overseeing the profession.

The professional body published the first DSM, used for standardized mental health diagnoses, definitions, and symptoms of psychological disorders. While the DSM was revised multiple times, this publication remained the standard in the U.S. and was also used in psychiatry internationally. According to the APA (2013), the DSM-5 adapted the mental illnesses diagnosis codes for alignment with the standards of the International Classification of Diseases (ICD) codes devised by the World Health Organization. This action provided clarity and aligned the psychiatric and medical professions in using the same diagnoses codes.

In 2018, the report by the National Institute of Mental Health (NIMH) showed that 46.6 million U.S. adults were diagnosed with some form of mental illness. The report also indicated that 1 in 5 U.S. adults or 19% of the population were diagnosed with a major mental illness. According to the NIMH report, the most common mental illness illnesses in the United States were anxiety disorder, major depressive disorder, PTSD, and bipolar disorder. In the following sections are discussions with an in-depth

description of these common mental illnesses, but by no means are the only mental illness that participants in the study experience. The first discussion was on anxiety disorder illness.

Anxiety Disorder Illness

Experiencing anxiety disorder was frequently described as excessive fear and avoidance of that specific object or situation, often when no true danger was present (Nikfarjam et al., 2018). Associations experienced with anxiety disorder included a sense of fear or loss of control that was associated with feelings of embarrassment (Munoz, 2018). Persons with anxiety disorder avoided this feeling of embarrassment usually by avoiding activities involving relationships at home, work, or at social gatherings. Anxiety disorder often impaired a person's daily functions and often lead to developing major depressive disorder (The National Institute of Mental Health, NIHM, 2018).

The NIMH 2018 report also showed an estimated 31.1% of all U.S. adults who experienced anxiety disorder developed the illness over time while others experienced a chronic diagnosis at some point in their lives. The NIMH report also showed that adults who were diagnosed with anxiety disorder, experienced the disorder as mild impairment (44%), moderate impairment (34%), and the rest had serious impairment (NIHM, 2018).

Anxiety Disorder Illness Treatment

In 2019, Zoun et al. reported current guidelines for the treatment of anxiety disorder, which included pharmacological management and multiple forms of therapy. The recommended pharmaceutical first line treatment included antidepressants that were classified as selective serotonin reuptake inhibitor (SSRIs). Benzodiazepines were only

recommended for short term use while long-term use has been discouraged due to the addictive quality (Zoun, 2019). Long-term individual or supportive therapy for anxiety disorder was recommended with or without the use of medication management. The next discussions are on major depressive disorder.

Major Depressive Disorder Illness

Major depressive disorder often included several symptoms. These are depressive moods, loss of interest or pleasure, decreased energy, feelings of guilt, low self-worth, disturbed sleep or appetite, poor concentration, and feelings of despair, and hopelessness (Zalar et al., 2018). These symptoms frequently resulted in major depression. These symptoms often progressed into anhedonia or no interest in life, and persons frequently stopped eating for long periods of time and because of the psychic pain, believed they were unable to get out of bed for days (Zalar et al., 2018).

According to a 2018 NIMH report, an estimated 17 million adults in the U.S. experienced a mild episode of major depressive disorder while 18% of U.S. adults received a diagnosis of chronic major depressive disorder in the past year. The report further showed that the greatest prevalence of major depressive disorder was among people who were 18 to 25 years of age (13%) and was highest in persons reporting two or more races (11%). Multiple race individuals seem to experience major depressive disorder more compared to people who identified themselves as single race individuals.

Felitti and Anda (2010) reported that (54%) of persons who are currently diagnosed with major depressive disorder have been attributed to adverse childhood events (ACE). The ACE was related to any one or all the abuses which included physical,

emotional, and sexual abuse. Researchers have noted that childhood traumas frequently began the pattern of major depressive disorder that often developed into adult major depressive disorder. Major depression disorder was the leading cause of disability worldwide and was associated with lower personal income, less education, lower self-esteem, history of a divorce, poor health, and higher use of alcohol and nicotine (Rubio et al., 2011).

A diagnosis of major depressive disorder occurred at later stages in some people's lives and often affected their recovery ability. Meyer et al. (2019) reported people who developed major depressive disorder after a myocardial infarction, experienced death by 1.2 to 3 fold over people with the same illness but were not diagnosed with major depressive disorder. Additionally, people who developed major depressive disorder had an increased risk of repeated cardiovascular events by 170% compared to those who did not have major depressive disorder. Repeated cardiac events increased in women with a co-morbidity of anxiety disorder.

Major Depression Treatment

Treating major depressive disorder included options identified by the NIMH report in 2018, which included therapy alone, medication alone, or therapy and medication combined. The report showed that most people diagnosed with major depressive disorder used a combined treatment of medication and therapy (65%), while a small amount of people (6%) utilized only psychiatric medication management. Approximately 35% of adults with major depressive disorder chose not to receive any

treatment, where such cases were likely people who had mild experiences with the illness.

In 2016, Guidi et al. reported moderate to severe major depressive disorder was treated with pharmaceutical antidepressants known as selective serotonin reuptake inhibitors (SSRI), selective norepinephrine inhibitors (SNRI), or atypical antidepressants. Each medication specifically targeted serotonin, norepinephrine or a combination of receptor sites. When major depressive disorder symptoms were not resolved with an antidepressant, these cases often required an augmentation with a second generation antipsychotic or mood stabilizer such as lithium, working as an adjunct to the antidepressant.

In 2018, Ciasca et al. reported pharmacological and psychotherapeutic intervention of major depressive disorder, yield up to 50% of treated patients with poor response to multiple trials of antidepressants, defined as treatment-resistant depression. Patients with treatment resistant depression (TRD) had lowered quality of life with more frequent medical visits and higher healthcare costs. Electro-convulsive therapy (ECT) for TRD continued to be used; however, this application was limited due to risk of anesthesia and cognitive side effects (Li et al., 2019). Another treatment for TRD has included repetitive transcranial magnetic stimulation (rTMS) (Pinquart & Forstmeier, 2012). The treatment of rTMS includes a non-invasive brain stimulation technique involved injecting a low-amplitude direct electrode. This process altered the membrane potentials of neurons and changed the rate of spontaneous depolarization (Pinquart & Forstmeier, 2012).

Using pharmacotherapy and psychotherapy combined increased the effectiveness in elderly patients with major depressive disorder and low medication adherence (Liu, et al., 2018). Additional therapies include: Reminiscence therapy, psychodynamic therapy, support therapy, and nondirective counseling, self-esteem therapy, life review therapy, cognitive-behavioral therapy, interpersonal psychotherapy, problem-solving and depression management therapy were considered first-line treatments for major depressive disorder for adults and elderly patients (Liu, et al., 2018; Bungay & Clift, 2010; Cuijipers, 2015: Pinquart & Forstmeier, 2012; Uttley et al., 2015).

Some researchers found that therapies and approaches included active engagement in creative activities such as art, often brought many benefits, including improved well-being, quality of life, health, and socialization. Using art as a therapeutic function was related to the possibility of concretization of thoughts, feelings, desires, and the facts of life using expressive resources (Liu, et al., 2018). The next discussion was on PTSD.

Posttraumatic Stress Disorder Illness

The PTSD illness frequently developed after a person was exposed to a traumatic event that was significant, which was greater than normal daily stresses. These traumatic events often included: Violent personal assaults, natural or human disasters, accidents, combat, and other forms of violence. The diagnosis for PTSD included three of the following four symptoms. The first was experiencing persistent, frightening thoughts and memories of the shocking event; second, experienced sleep problems. The third was feeling detached or emotionally numb from others, and fourth was uncontrolled

hypervigilance, which frequently occurred at the job, at home, and in social situations (APA, 2013). People who experienced personal trauma from physical attacks had an increased risk of developing PTSD (Asmundson, 2015).

In 2018, the NIHM report that PTSD was diagnosed in 3.6% of U.S. adults (approximately 6,480,000 people). The lifetime prevalence of PTSD was estimated as (6.8 %) of all U.S. adults. The report detailed that of all people with PTSD illness, most people with severe PTSD impairment (37%) while 33% had moderate impairment and 30% had mild impairment of PTSD.

Posttraumatic Disorder Treatment

Downs (2018) reported pharmacotherapy and psychotherapy as monotherapy or in combination provided beneficial treatment for PTSD. The treatment was based on individual circumstances, availability of treatment, and the client's preference for pharmacotherapy and psychotherapy as monotherapy or in combination. The combined treatment of pharmacotherapy management and trauma based psychotherapy was plausible (Downs, 2018).

Pharmacotherapeutic approaches were frequently considered appropriate for client who have developed anxiety disorder, major depressive disorder and symptoms of PTSD. The first line of treatment are SSRIs, SNRI antidepressants followed by tricyclic antidepressant as second-line treatments (North et al., 2010). The addition of Prazosin, categorized as an alpha-1 adrenergic antagonist, has been successfully used to stop reoccurring nightmares has been particularly used in veterans (Jeffreys et al., 2012).

Psychotherapy included prolonged exposure therapy and cognitive processing therapy have been the best empirical evidence for efficacy for PTSD treatment (Lee et al., 2019). Eye movement desensitization and reprocessing (EMDR) therapy emerged as a trauma-focused therapy with documented effectiveness (Downs, 2018). During EMDR, the client focused on the emotionally disturbing memory while simultaneously focusing on an external stimulus. This action has allowed that person to reexperience the traumatic memory while allowing the memory to gain increased resolution and acceptance. Additional non-trauma focused psychotherapies included supportive therapy, motivational interviewing, relaxation, and mindfulness for the treatment of PTSD (North et al., 2010).

The treatment of PTSD with pharmacotherapy and psychotherapy as monotherapy or in combination provide beneficial for treatment of PTSD. Ultimately, the client must be willing to seek treatment. Mental health providers and therapists often have provided options to the client and it was the commitment of the client and the mental health professional to adapt the PTSD treatment to alleviate the most troubling symptoms of the PTSD.

Bipolar Disorder Illness

Bipolar disorder illness has been characterized by dramatic shifts in mood, energy, and activity levels that has modified the person's ability to carry out daily tasks (Grande et al., 2016). Bipolar disorder was previously known as manic depressive disorder and was characterized by episodes of mania, hypomania, and depression. Bipolar Disorder I disorder included more dramatic fluctuations while Bipolar Disorder II was

marked with a greater frequency of depression. Both mood disorders have a high rate of psychiatric comorbidities that had continued to impair the person's quality of life as well as increased recurrent hazards of suicidal ideation and behaviors with greater jeopardies of death (Gonda et al., 2012).

About one third to one half of all persons diagnosed with bipolar disorder have attempted suicide at least once in their lifetime with (15 to 20%) suicide attempts finalized with death (Schaffer et al., 2003). The incidence of death by suicide was 20 times compared to the general population, especially in persons who do not seek out treatment (Pompili et al., 2013). Variables known to increase suicidal risk are men with a first-degree family history of suicide (Schaffer et al. 2015).

In a 2018, the NIMH report estimated bipolar disorder to be present in 3% of all U.S. adults and 4.4% U.S. adults experienced bipolar disorder episodes in their lifetime. An estimated 17% of U.S. adults have experienced moderate impairment and 83% U.S. adults have experienced serious impairment. This impairment has included disability of job performance, household maintenance, social life, and maintaining intimate relationships.

Bipolar Disorder Treatment

The treatment of bipolar disorder was based upon the most prevalent symptom experienced by the client at the time of assessment. Researchers have investigated the efficacy of antidepressant, mood stabilizers, first and second generation antipsychotic medications in the treatment of bipolar disorder. Cipriani et al. (2011) reported antipsychotics medications were more effective in the treatment of bipolar disorder

mania. Vieta (2014) argued that treating BD-I depression as a monotherapy only with an antidepressant have been proven controversial and encouraged the use of a mood stabilizing medication.

In 2015, Yildiz et al. argued mood stabilizing medications such as lithium, valproate, and carbamazepine, provided no advantage to second-generation antipsychotics. Grande et al. (2016) added that bipolar disorder with psychosis was often treated with antipsychotic medications and mood stabilizers to regulate bipolar mania and depression. Schoeyen, et al. (2015) added that ECT has shown to provide efficacy in treatment resistant bipolar disorder with acute mood episodes, particularly in patients with psychotic or catatonic features.

Yildiz et al., (2011), reported psychosocial interventions often decreased the risk of relapse, improved treatment adherence, and reduced the number and duration of hospital admissions. Other useful treatments for patients diagnosed with bipolar disorder included psychoeducation, cognitive behavioral therapy, interpersonal, and social rhythm therapy (Frank et al., 2006).

The mental health treatment included smelling salts, body fluids rebalanced, trephining, electroshock treatment, lobotomies, psychotropic medications, and therapy. While asylums were the first mental illness institutions created to remove persons with mental illness to be removed from the general public. Persons in asylums, were beaten and chained to beds. By the 20th century Beers introduced the Mental Hygiene Movement, that created the National Mental Health Association which then formed the first mental health psychiatric hospitals (DiNitto & Johnson, 2016).

In 1946, President Harry Truman created the National Mental Health Act (NMHA) and the National Institute of Mental Health. (NMHA) that requested a cure to be formulated for mental illness specified for traumatized World War II soldiers and others (Slate et al., 2013). Chlorpromazine was created in 1951 and Chlorpromazine was believed to be the cure, for persons with mental illness, that led to persons discharged from mental institutions (Slate et al.) President Kennedy signed the Mental Retardation Facilities and Community Mental Health Centers Construction Act in 1963, that led to closing asylums and persons diagnosed with mental illness were returned and treated in their own communities.

The use of the psychotherapeutic drugs played a pivotal role in the 1960s in the establishment for the Mental Retardation Facilities and Community Mental Health Centers Construction Act (CMHC) of 1963 (DiNitto & Johnson, 2016). By the 1970s, the state psychiatric hospitals and criminal justice systems became interconnected to treat mental illness (Knapp et al., 2010). Many persons diagnosed with severe forms of mental illness were unable to adjust to communities and stopped their medications and were then later arrested and returned to mental health hospitals. While the pharmaceutical industry has promoted the cause of mental illness as a brain chemical imbalance, the number and types of pharmaceutical medications have continued to increase.

Psychoanalysis has been one of the most dominant psychogenic treatment for mental illness since the first half of the 20th century and continued to progress into the 21st century (Magnavita, 2006). Type of therapies have included: Cognitive, cognitive-behavioral, psychodynamic, and client-centered approaches to psychotherapy applied in

individual, marital, family, or group. Broader behavioral, cognitive, cognitive-behavioral, psychodynamic, and client-centered approaches to psychotherapy was applied to individual, marital, family, or group formats. The choice of therapy was aligned with the client required needs.

Resilience

Connor and Davidson (2003) described resilience as the ability to endure life challenges and stressors without developing mental health diagnoses. Masten et al. (2006) added that resilience as the individual's ability to endure life adversities and allowed positive life adjustments and adaptations. While resilience was described, the researchers have not defined how resilience has been developed.

Developing Resilience

Building resilience against life challenges has been described as the ability to overcome obstacles and not to allow traumas to negatively affect that person's stability. Reivich and Shatte (2002) reported that an example of building resilience has included communities joining to assist that person to face, overcome, and become strengthened while over-coming economic or environmental losses. Community support have been shown as one example of how individuals cope positively with adversity Grotberg (1995). The development of resilience has been described as dealing with adversity while learning how to manage risks and was viewed as gaining protection from the combination of both hazard/s and vulnerability.

Resilience and Social Support Theory

In 2015, Luther linked social support to resilience and reported families who were provided with positive social support have encouraged persons to develop resilience. Social support has been interpreted as a protective factor or moderating factor that has decreased the impact of stress which created and promoted resilience. Social support was defined as the connection to the development of resilience (Luther, 2015).

Adults with unresolved trauma frequently have difficulty forming and maintaining supportive long-term relationships and often developed poor mood regulation such as jealousy and vengefulness (Buckley, 2013). Without supportive relationships, childhood traumas have been associated with decreased ability to trust others, increased psychiatric and medical illnesses, isolation, low self-esteem, difficulty in the formation and maintain interpersonal relationship, homelessness, limited education due to learning disabilities, socioeconomic limitations, drug use and increased re-victimization (Buckley, 2013). When social relationships are limited, the child and later adult's ability to form attachments or social relationships are permanently damaged which frequently limits the development of resilience in adults (Bowlby, 1973).

A positive support person or persons has been linked to the activation of the brain that caused the release of stress neuropeptides such as opioids and oxytocin, known to the increased formation of resilience (Eisenberg & Cole, 2012). Supportive families provided increased resilience by boosting the immune system that has protected the body from the long-term inflammation damages (illnesses and illness) that were caused by trauma (McElroy & Hevey, 2013; Southwick et al., 2005). Victims of childhood trauma have not

always developed a mental illness diagnosis and not every person with a diagnosis of psychological illness has been the victim of trauma. Previous research determined social support frequently increased resilience, but it was not known if the severity of childhood trauma experience levels (independent variable) affected the development of resilience against life challenges (dependent variable).

Resilience was believed to be created in persons with an internal locus of control with increased cognitive flexibility, in which the abuser were blamed, and the trauma even was not internalized (DiGangi et al., 2013; McElroy & Hevey, 2013; Southwick et al., 2005). Young children exposed to childhood trauma have not developed the ability to create this internal focus and have an increased susceptible to reactions of animalistic fear responses when exposed to new experiences (Bowbly, 1973).

Childhood Trauma

Childhood trauma has been described as negative physical, emotional, sexual, or psychological experiences that include physical and medical neglect, inadequate supervision, and exposure to violent environments before the age of 18 years (Ortiz & Sibinga, 2017). ACE levels have been described as negative emotional response to an unanticipated or startling negative experience known to increased stress in children. These traumatic experiences have included neglect; physical, sexual or emotional abuse; exposure to violence; exposures to persons diagnosed with severe mental illness; incarceration of family members; substance abuse in the family; parental absence due to divorce or separation; and abandonment in low socioeconomic environments (Ortiz & Sibinga, 2017).

Researchers reported adults with diagnoses of severe mental illness (SMI) who have been exposed to additional traumas, developed increased vulnerability of re-victimization that frequently developed into PTSD (Grubaugh et al., 2011; Lu et al., 2013). Subica (2013) noted that physical and forced sexual trauma were more common in persons with SMI. Women with SMI have greater exposure to domestic violence, childhood sexual trauma, adult sexual assault, and stalking while men with SMI have greater exposure to warfare, robbery, stranger assault, and were threatened (Lu et al., 2013). Research participants diagnosed with SMI have reported history of 34% to 53% exposures to child trauma incidence, and 43% to 81% of the participants reported a life re-victimization but did not research if support and resilience were factors (Mueser et al., 1998).

Adult and childhood sexual assault has been associated with increased emotion dysregulation (Cloitre et al., 2005; Ullman et al., 2014). In 2019, Raudales et al. reported emotion dysregulation increased the development of PTSD symptoms. It was plausible that victims of sexual assault specifically may have experienced a more intimate betrayal from a perpetuator who victims otherwise rely on, and experienced intense distress following a trauma. This distress frequently has increased maladaptive coping that has increased the emotional responses of emotional numbing and avoidance.

Subica (2013) argued persons with childhood sexual trauma history reported greater PTSD, depression, poorer mental health, and physical health functioning than those without childhood sexual assault (Subica, 2013). Participants with forced sexual

trauma reported more significant PTSD and depressive symptoms and decreased mental health and physical health functioning than those without this history (Subica, 2013).

Childhood Trauma With Social Support

In 2014, Feeney and Collins reported positive social supportive relationships are associated to improved health and well-being from infants thru adulthood. Children who were involved in close, supportive relationships have noted to have greater feelings of support, strength, and security (Feeney & Collins). This research provided evidence that childhood trauma was mitigated by social support.

Childhood Trauma Without Social Support

De Bellis (2005) argued persons who have a history of neglect have greater difficulties in social relationships that increased isolation from others. Emotional trauma, low self-esteem, social competence, and aggression toward peers are noted to impair the child's ability to build relationships with peers. These relationships are critical factors in personality development and future development of social support systems.

Additionally, children who were traumatized were noted to have greater aggression and bullied others more than children who were not traumatized (Cicchetti, 1998). Children who experienced emotional trauma between the ages of 8 and 10 were less likely to have a best friend and had fewer friendships compared to children who were not exposed to emotional trauma (Cicchetti, 1998). Cicchetti (1998) reported that victims who were abused, usually do not acknowledge friendships or support systems as valuable.

Other researchers in 2019, Devrishi et al. described bullying as a reaction that caused people to lose hope and confidence in themselves. These people were prone to daily struggles of coping leading to feelings of helplessness and loneliness that frequently led to the development of major depressive disorder. The research included (N = 284) teenagers, of whom women (n = 145) or (51.1%) and men (n = 139) or (48.9%) between the ages of 13 and 18 years with (M = 15.5) years and a Standard Deviance (SD = 1.2).

These researchers revealed a significant statistical relationship between the frequency of men and women traumatized by school bullying (verbal, physical, or emotional) and major depressive disorder symptoms (r = 0.485). Gentry and Pickel (2014) reported that women frequently experienced greater emotional trauma with anhedonia and negative self-esteem, while men experienced greater interpersonal problems or lack of effectiveness. Teenagers, who were bullied regardless of gender, age or academic performance, experienced depressive symptoms and were more prone to suicidal thoughts and behaviors (Dervishi et al., 2019).

Social support in intimate relationships was investigated by Larsen et al. (2011) of (n = 388) women, aged 18 to 72 years, and (n = 296) men, aged 20 to 66 years, who attended a mental health clinic in the northeast region of the United States. Larsen et al. (2011) questioned participants with childhood history of physical or sexual trauma and determined a difference in gender relationships were present in participant's perceived quality of adult supported in intimate relationships. Physical trauma events of six or more events occurred in 6% women and 5% men, followed by five or fewer episodes of

physical trauma in 26% women and 26% men, and no reported physical trauma in 68% women and 69% men (Larsen et al., 2011).

People who experienced sexual trauma, which were six or greater events were reported in 14% women and 6% of men, five or fewer occurrences of sexual trauma in 14% of women and 11% men, and no sexual trauma in 72% women and 83% men (Larsen et al., 2011). Participants indicated that the frequency of physical trauma in both women and men negatively affected their support in intimate relationships. These participants with histories of sexual trauma however did not believe their relationships were affected (Larsen et al., 2011).

Larsen et al. (2011) concluded that individuals with a childhood sexual abuse history have reported emotional outcomes of shame, poor mate choices, limited trust, and had difficulty sharing and confiding in intimate relationships. This research did not detail the severity of childhood trauma, social support, or if the physical and sexual traumas were not identified if occurring in childhood or adulthood. Rellini et al., (2012) also researched social support and relationship satisfaction. Rellini et al.'s online research included (N = 192) women between the ages of 18 and 25 years, and of this number, (n = 103) participants reported at least one type of childhood trauma. Participants with childhood trauma histories reported increased mood changes that decreased sexual and relationship satisfaction in their relationships but no association on relationship intimacy or affection (Rellini et al., 2012).

In 2019, Banford et al. supported this same outcome and added traumatic experiences within and outside the family of origin in childhood disrupted couple

functioning later in life. While multiple research studies have defined support and relationships, no research had defined if resilience was developed without a supportive social relationship. No research has determined if resilience was achieved in childhood trauma victims which was a significant gap in present the research. This remained a gap in research and added validation to the relevance of this study.

Childhood Trauma and Development of Mental Health Disorders

Researchers examined data from the 2008 to 2012 National Survey on Drug Use and Health (NSDUH) of (N = 229,566) U.S. adults 18 years or older (De Bellis et al., 2014; Karg et al., 2014). Participants were surveyed on the prevalence of mood disorders, substance disorders, and eating disorders related to childhood traumas and traumas with correlations of age and genders. Karg et al. noted that major depressive disorder was greater in the 18 to 25 age group while anxiety disorder was higher in the 26 to 49 age group, and PTSD was significant in the 26 to 49 age group.

Women were noted to have a higher incidence of anxiety disorder, major depressive disorder, PTSD, and eating disorders, while men have a greater prevalence of substance use disorders (Karg et al., 2014). According to Karg et al. (79%), of participants who reported childhood physical trauma had increased exposure to child sexual trauma, neglect, and parental psychopathology. Furthermore, (84%) of participants with histories of childhood physical trauma reported a lifetime history of at least one psychiatric diagnosis with higher rates of suicide attempts than participants without histories of childhood physical trauma (Karg et al., 2014). Karg et al.'s research was

significant due to the high number of participants and that the results were divided by age and gender.

Herrenkohl et al. (2013) examined data from two counties in eastern Pennsylvania, PA, and found relationships between childhood trauma and child neglect was associated with adult mental health. These researchers also found there was a relationship between substance use abuse and poor physical health outcomes among children. Of all participants (N = 357), 47.9% were women (n = 171) and most participants were considered young (M = 36) range = 31 – 41, and SD was not provided). The study results showed that adults with histories of childhood trauma were noted to have greater outcomes of depression, anxiety, with greater mental and physical health problems, alcohol use difficulties with increased risk for drug addiction, which was supportive of previous research results.

Messing et al., (2012) completed a secondary analysis of data that was collected by the Safe at Work Study in the mid-Atlantic area. Messing et al. analyzed data from (N = 1,150) women between the ages of 18 and 71 (M = 38.86, SD = 11.32), who self-identified as 65% White, 21% African American, and 9% Asian. Participants reported experiencing childhood physical trauma (n = 208) that were 18%, childhood sexual trauma (n = 199) were 17%, and interpersonal violence between parents or caregivers (n = 120) were 10% (Messing et al., 2012). The results also showed that these participants who were exposed to childhood sexual trauma reported greater PTSD symptoms (33%) than those exposed to childhood physical trauma (30%) and interpersonal violence of parents or caregivers (21%). Additionally, the participants who were exposed to

childhood sexual, physical trauma, and sexual interpersonal violence had an increased risk of interpersonal violence as an adult or revictimization (Messing et al., 2012).

Childhood Trauma, Resilience and Social Support

In 1982, Werner and Smith completed the Kauai Longitudinal Study, these researchers determined that resilience developed in children through internal and external stresses occurred in the relationships between mothers and children. The Mother-Child Project conceptualized and defined that resilience developed over time by interactions of the individual with the environment (Egeland et., 1993).

Researchers proposed that the construct of child resilience included two essential factors (Masten, 2011; Luthar et al., 2000; & Rutter, 1987). These two factors included the presence of serious threats to adaptation or development, and the achievement of positive adaptation with good outcomes. The child's developmental and functioning age level had influenced the child's risk and protective factors in the child's adjustment and development of resilience. The study also showed that children built resilience through normal human adaptive processes, which included the development of cognition, regulation of behavior, interactions with caregivers, and the environment (Masten, 2011).

Demographics and Resilience

Age and Resilience

In 2013, the Administration on Children, Youth, and Families (USDHHS) researchers determined childhood trauma had the greatest prevalence in age birth to 3 years at a rate of 14% /1,000 children. This was followed by children with ages 4 to 7 years with a rate of 10% /1,000 children, then 8 to 11 years at 8% /1,000 children, ages

12 to 15 years with a rate of 7%/ 1,000 children, and finally ages 16 to 17 years with a rate of 5%/ 1,000 children. The highest rates of child trauma by race were noted in Black with a rate of 15%/1,000 children, American Indian and Alaskan Native at 13%/1,000 children, followed by multiple race at 11%/1,000 children, Hispanic children at 9%/1,000 children, Pacific Islander at 8%/1,000 children, White at 8%/1,000 children, and Asian at 2%/ 1,000 children (USDHHS, 2013). The researchers noted neglect had the greatest prevalence of (7%/1,000 children, followed by physical 2%/1,000 children, and sexual, psychological, and emotional trauma 1%/1,000 children (USDHHS, 2013).

Researchers found that when women were subjected to sexual trauma from an early age, these women also experienced PTSD symptoms at an early age. Teicher et al. (2009) reported exposure to childhood sexual trauma appeared to sensitize women to the development of major depressive disorder to begin in early adolescence. Findings suggested that the absence of symptoms at the time of childhood sexual trauma was a sign of resilience. Teicher et al. studied 29 young women from ages 19 to 21 years of age who showed evidence of sexual trauma (n = 18) 62% and these women met the full criteria for major depressive disorder. Researcher determined that major depressive disorder occurred between 6 and 13 years after the onset of sexual trauma. Survival time from onset of trauma to the onset of depression for was from 9.80 – 13.13 years for 95% of the population. There was however the onset of a PTSD surge for women between ages 4 to 12 years of age of 12 years while the average onset of PTSD was 8 years +/- 3.9 years.

In 2009, Teicher et al. used a computerized tomography scan (CT) on young women and determined that the bilateral hippocampal volume was significantly reduced. For those who experienced childhood sexual trauma (CST) from age 3 to 5 years and again from 11 to 13 years of age. For those who experienced this reduction of the bilateral hippocampal volume, these women also experienced higher levels of PTSD and never responded favorable to PTSD treatment from the rest of their lives. Women between ages 9 to 10 years who experienced CST had a reduced corpus callosal area. Results from a computerized tomography (CT) scan for adult women showed a reduction in their frontal cortex gray matter volume, which indicated that these women were exposed to CST from ages 14 to 16 years (Teicher et al., 2009). These results demonstrated that experiencing CST at various stages of growth resulted in specific brain development alterations and affected these women in adulthood negatively, many for the rest of their lives (Anderson et al., 2008).

A social support system offered protection to the hippocampus during development, which reduced the likelihood of major depressive disorder following exposure to childhood trauma (McEwen, 2000). Caspi et al. (2003) studied the role of serotonin transporter as a moderating response between major depressive disorder and experiences of childhood trauma. These researchers found that the serotonin transporter gene-linked promoter (5-HTTLPR) changed, which then caused an increased risk of developing major depressive disorder in individuals exposed to childhood trauma. The risk for major depressive disorder developed due to the over activation of the serotonin system during childhood development when exposed to stress (Smyth et al., 1994).

Nurturing social support systems protected injury to the short allele of 5-HTTLPR that was a protective factor in the development of major depressive disorder (Kauffman et al., 2004).

Researchers found that childhood trauma experiences also affected people in their later years, which often lead to suicide ideation for approximately 25% of victims, which indicated a sign of weak resilience. According to Sachs-Ericsson et al. (2016), when childhood trauma consequences were significant, long-term consequences were correlated with suicide ideation later in life. These studies provided evidence that childhood trauma experiences affected the development of children's brain, often leading to PTSD that was not treatable in later life. Instead, many displayed low levels of resilience because these experiences contributed to suicide ideation for many adults who experienced childhood trauma. In a 2016 study, researchers argued that instead of looking at the factors associated with suicide in later life for adults, researchers must seek to increase their knowledge about improving well-being and mental health in an attempt to improve suicidal ideation outcomes among these adults (Heisel et al., 2016).

There is a paucity of research on the relationship between age and resilience for people who experienced childhood trauma and have mental illness. A study by Sambu and Mhongo (2019) was about age and resilience, but for people who were not afflicted with mental illness. People who were not diagnosed with mental health diseases showed a normal development of resilience for both men and women. Sambu and Mhongo's study on internal factors that influenced resilience assessed three age groups among 287 men and 113 women. Participants were from 20-35, 36 to 55, and 56 – 75 years old.

Resilience scores ranged from a low of 63.4 to a high of 65.67, on a scale of 100. A higher score indicated a higher level of resilience.

The researchers argued that as people got older, their level of resilience was higher, but these differences were not significant. These results show that people who did have mental illness showed a moderately high level of resilience. Study results from this study showed that age was associated with resilience for people with mental illness. More analysis on this population is addressed in Chapter 5. Following is a discussion on the association of education on building resilience in adults who experienced childhood trauma and were diagnosed with mental health disease.

Education and Resilience

Researchers found that people who experienced childhood trauma and diagnosed with mental illness had reduced resilience because of decreased educational abilities. Assogna et al. (2020). found that people experiencing early childhood trauma (younger than 5 yrs. old) with repeated incidence had a volume reduction in the amygdala and hippocampus areas of the brain, needed for processing memory, executive functioning, and complex processing. Lu et al. (2017) determined since the development of the brain was inhibited, these adults were therefore unable to benefit from educational experiences and remained educationally undeveloped. Since the damage to the brain reduced normal functioning among people who were victims of childhood trauma and were diagnosed with mental health disease, their level of resilience also decreased. Older studies by Currie et al. (2010) reported these findings, which continue to show that adults with documented histories of childhood trauma continued to experience lower levels of

education, employment, and earnings with fewer assets as adults, when compared to persons without histories of childhood trauma.

Children who are exposed to trauma, have increased likelihood to develop mental illnesses. Mental illness diminishes the child's ability to learn and lowers their academic achievement. Larson et al. (2017) reported chronic childhood trauma significantly and negatively impacts academic achievement and performance of competent employable skills. Persons with diminished educational ability and are unemployed have increased risk for the development of mental illness and chronic medical illnesses that leads to an early death. Children and adolescents who perform poorly in school, have diminished educational and employment opportunities.

Childhood trauma also affected adults who were older than 5 years. In a study by Lu et al. (2017), these results were confirmed that childhood trauma significantly damaged the development of the brain in children before the age of 16 years. The research was conducted among (N = 48) adult participants 18 to 33 years old included men (n = 8) and women (n = 30) for assessing histories of childhood trauma. The goal was to determine if adults who had histories of childhood trauma during childhood to early teenage years (up to age 16 years old) experienced damage to the development of their brain. After conducting CT scans of these adults who experienced trauma and adults who did not experience trauma, the results were convincing. Those who experienced childhood trauma showed damage to the medial prefrontal cortex of the brain, while there was no damage to the same area of the brain for those who did not report experiencing childhood trauma.

Researchers argued that the medial prefrontal cortex of the brain was necessary for developing neurobiological structure and functions of the brain which controlled the hypothalamic pituitary adrenal axis, hormones, and neurotransmitters (Assogna et al., 2020). These findings explained why people who experienced childhood traumas and were diagnosed with mental illness were unable to increase educational abilities compared to their peers who did not have such experiences.

Researchers clearly demonstrated that people who experienced childhood trauma would also experience poor planning, problem-solving skills, and an ability to analyze different options for solving problems had poor resilience. People's inability to express themselves, retain important information, and express cognitive awareness all demonstrated poor resilience in coping with life's challenges. These findings clearly showed an alignment between poor educational and employment achievements for people who experienced childhood trauma and mental illness. Following are discussions on employment status and resilience for people who experienced childhood trauma and mental illnesses.

Employment Status and Resilience

People with mental illness and experienced childhood trauma were often placed in a conundrum in that many people with this illness wanted to participate in the workforce but were unable to do so. Trauma experienced in the past often did not give people in this population the ability to increase confidence or acquire the necessary skills to become gainfully employed. For those who successfully acquired work skills, for many, they

were placed at high risk of revictimization by employers, paid low wages, and sometimes further traumatized by their work experiences (Metzler et al., 2017).

Factors that reduced adult employment were associated with reduced cognitive abilities, lower educational attainment, and social isolation (Assogna et al., 2020; Lu et al., 2017). Adults who experienced childhood trauma and were diagnosed with mental health disorder, who found employment also experienced social stressors such as crime exposures, substance use, and increased antisocial behaviors. According to some researchers, these experiences contributed to a reduction in resilience in overcoming life's challenges (Jaffe et al., 2007). People with mental illnesses and experienced childhood trauma would often be deemed as low productivity workers who often experienced poor health (Metzler et al., 2017).

Previous studies suggest that exposure to childhood trauma therefore had a debilitating outcome on adults who experienced childhood trauma because these adults were unable to develop functional and academic skills, which often lead to low levels of employment. Their resilience against life problems were low because of poor reasoning functions and high levels of stress. For this reason, many adults who experienced childhood trauma and were diagnosed with mental health disease were not employable. Following is a discussion on gender and resilience in the existing literature in adults who experienced childhood trauma and were diagnosed with mental health disease.

Gender and Resilience

Researchers found that there was no difference in resilience between men and women. Lightfoot et al. (2020) found that men had similar level of resilience compared to

women when it comes to dealing with an environmental disaster such as an oil spill. The study included (N = 326) participants where women made up the largest proportion of the sample (n = 199) and men made up the rest (39%). Data were collected using the CD-RISC 10 survey for observing resilience. The results were decisive in that resilience among men (M = 30.22, SD = 7.81) were not significantly different to resilience among women (M = 30.33, SD = 7.43). These findings were demonstrated throughout the literature.

A study in 2006 by Campbell-Sills et al. showed different findings in the levels of resilience between men and women. The research showed that there was not a significant difference in resilience between men and women; however, it was noted that older women expressed the greatest resilience followed by younger women and men expressed the least resilience. These researchers reported that young adults of both genders had similar personality and psychiatric symptoms. Results of this study indicated that there was no clear determination that resilience between men and women were affected by personality and psychiatric symptoms.

While communication skills between men and women were differentiated, the role of social support such as friend and family had an effect on communication. Phillips et al. (2016) reported that for men who had a secondary level of social support (friends) showed lower levels of resilience compared to women who had primary levels of social support (family). There were no studies however on the effects of communication among men and women on resilience if the types of social support were reversed among these genders. These results indicated that women focused on inner familial support while men

preferred to focus on communicating with work colleagues for their sense of social support. These results clearly demonstrated that communication was closely aligned and was responsible for differences in resilience among genders. These results indicated that difference in resilience based on gender showed no significant difference in the literature, even among people who experienced psychiatric symptoms. Following is a summary of the literature review section of this chapter.

In Chapter 2, the social support theory has been discussed in relationship to consequences in mental illness, childhood trauma, and the development of resilience. The literature review provided key arguments including that social support development was imperative to the development of adult resilience. Childhood trauma levels often varied among victims and while some adults developed mental illness, not all adults who were exposed to childhood trauma developed mental illness.

Current research on childhood trauma has demonstrated that a child's brain and personality development were modified by adverse childhood experiences. The ACE questionnaire score has corresponded to challenges and disabilities linked to long-term cognitive development, mental illness, and poorer physical health. Childhood trauma permanently damaged the natural growth of a child and later influenced mental, physical, and psychological outcomes. These deficits in adult psychological maturation were frequently developed into low levels of resilience.

Arguments in this chapter demonstrated that people diagnosed with mental illness who exhibited low levels of resilience were at high risk of having increased chronic psychiatric and medical illnesses. Experiencing these illnesses likely resulted in adult

revictimizations for those who seek employment, but often led to decreased socioeconomic situations. Conducting this literature review has expanded multiple aspects of adult outcomes. Researchers have continued to argue about the severe outcomes of childhood trauma on developing resilience if there was no social support provided. This relationship gap was imperative for the completion of this study. Previous research has discussed resilience and social supports, but no research has determined if the severity of childhood trauma and resilience was formulated separately.

Summary and Transition

In Chapter 2, discussions centered on the current literature outline the arguments of researchers in the mental health discipline on the association of childhood trauma on resilience for people who were diagnosed with mental health disease. Discussion began with a restatement of the current problem and the purpose of the study where the specific problem was outline. There was a discussion of the chosen methodology and design used in the study. Following discussions were on the methodology used for capturing literature and the sources of those studies relevant to the study. The literature search strategy was clearly identified when using complex search strategies in a major online database along with other global and national databased used by research scholars.

The first literature discussions were on the social support theory, which was the theoretical foundation of the current study. The current literature showed the principles related to the theory and how these principles were important when analyzing the relationship between childhood trauma and resilience among the study population. All but one of the principles were chosen for the current study and as such, there were no

discussions on the role of spiritual support as a source of social support for this population. Discussions on principles such as emotional support showed the importance of friends and family members in the lives of people with mental illness and the role such support play in building resilience.

Many recent studies indicated that social support was an import factor for building resilience not only for people with mental health disease, but also for people who were experiencing difficulties from medical diseases such as being HIV positive. In the summary section of this study, there was a final discussion of the belongingness/affectionate support, emotional support, and tangible/physical support principle, and how these factors provided a positive outcome in the lives of people in other populations. As such, the hypothesis of the current study was that these factors were likely to be effective for people who experienced childhood trauma and mental health disease and needed to build resilience for coping with life.

The following discussions were about the population of people with mental health disease, the history of mental health disease, and the history of treating mental illnesses around the world. Early in the diagnosis of mental health diseases, practitioners thought that people were possessed by the devil and as such many people were castigated and further traumatized, and some were even burned at the stake. Fortunately, development in the diagnoses and treatment improved and renowned doctors such as Dr. Chiarughi and Dr. Pinel encouraged better treatment of people with mental illness, and that these treatments must include improved hygiene and increased activity. Following were

discussion on the various and most popular types of mental illnesses found in the current literature.

Discussions on resilience followed with descriptions and definitions of resilience with was individual's ability to endure life adversities and allowed positive life adjustments and adaptations without experiencing mental health breakdowns. Researchers argued about the best was to build resilience, and having social support was a known contributor. Building resilience was found to be difficulty for some people, especially those who experienced childhood traumas and mental illnesses. These people therefore had low cognitive flexibility and challenges in developing a strong internal locus of control for dealing with challenges. Deep discussions on the childhood trauma followed, outlining the physical and psychological damages of these experiences. Researchers further argued the exponential damaging outcomes of mental illness for people who experienced childhood trauma.

Experiencing childhood trauma led to developing low self-esteem, low social competence, and aggression towards others, which all caused an inability to develop long lasting relationships with others. Discussions indicated that experiencing childhood trauma was a catalyst for developing mental health diseases for many people. Researchers discovered that participants who reported childhood physical trauma had increased exposure to child sexual trauma, neglect, and parental psychopathology. It was therefore important to study the current arguments found in the literature on childhood trauma, resilience, and social support.

Following were discussion on the demographic variables used in the current study as related to resilience. For instance, there was a discussion on the relationship between the age of individuals and their ability to build resilience. Experiencing childhood trauma resulted in poor levels of resilience for many, even if these individuals did not have mental diseases. Women showed greater sensitivity to the association of childhood trauma, which created the onset of PTSD and depression in later life. Results from CT scans demonstrated the damages caused to the bilateral hippocampal volume section of the brain that was associated with experiences of trauma in childhood. For these people, researcher found that social support during childhood helped protect the brain from damage and encouraged proper development of children.

Arguments in this literature review showed that most people who experienced childhood trauma and mental health disorder did not have higher levels of education that were beyond high school education. This was so because of damages to the amygdala and hippocampus regions of the brain, which was also associated with low levels of resilience. As such, much of the population remained unemployed. For those who managed to find employment, researchers found that these individuals experienced abuse at the hand of employers, and many turned to substance use and abuse as coping strategies because of low resilience. Researchers found that individuals with mental illnesses and experienced childhood trauma were often deemed as low productivity workers and often experienced poor health.

A study of any difference in resilience based of gender showed that there was no significant difference in resilience between men and women. Some researchers also

examined if personality and psychiatric symptoms played a role in developing resilience between men and women. The results were clear, there was no clear determination that resilience between men and women were affected by personality and psychiatric symptoms. A common factor found the literature was that for all the variables, social support had the greatest outcome in developing resilience among people who experienced childhood trauma and was diagnosed with mental health disease.

In summary, the literature was clear about the outcomes of childhood trauma on resilience for individuals with mental illness. While there were several studies on the associations of social support for people with mental illnesses, there remained a gap in the literature on how people who experienced childhood trauma and developed mental health disease benefitted from various type of social support in the fight to build resilience against life's challenges. Practitioners in the psychology field are likely to benefit from the results of this study because the results will outline how each variable, or a combination of variables affected resilience for mental health patients. People who experienced these childhood afflictions also experienced brain damaged, which affected them for the rest of their lives. As such, providing the necessary support is meaningful for helping people develop greater levels of resilience for coping with life's challenges and avoid experiencing mental health breakdown. Following is a discussion on the methodology used for collecting data in Chapter 3 for the present study.

Chapter 3: Research Method

Introduction

The purpose of conducting this quantitative correlational study was to test the relationship among social support and levels of childhood trauma experienced and their association with resilience in people with mental illness. The independent variable was levels of childhood trauma and was measured using the adverse childhood trauma experiences instrument. The dependent variable was resilience against life challenges measured using the resilience scale. Social support and childhood trauma were used in this study to determine if these variables had any association to resilience. Covariates in this study included age measured in years; gender measured as female, male, or other; education measured by level of education completed; and employment status measured as employed, unemployed, or volunteer.

Discussions in Chapter 3 begin with providing a rationale for the research design chosen for the current study. Discussions also include why other designs were not applicable and why the chosen design was best suited for responding to the research question and hypotheses. In the methodology section are discussions on the population studied and the importance of studying this population for the psychology discipline. There are also discussions on the sampling strategy used for collecting data and why the convenience sampling stated was the preferred practice for the current study. The procedure for collecting data followed with a determination of the appropriate sampling frame necessary to study the current phenomenon. Conducting a power analysis allowed for understanding the required sampling size and the criteria for calculating the sample

size. The recruitment procedure and how participants were able to participate in the study followed along with treatment of the data after data collection.

There is a detailed analysis identifying the instruments used in the present study and why these instruments were necessary for observing the present phenomenon in the current population. The process of data analysis for the study is outlined followed by discussions of validity in the study. Discussions of ethical procedures, how access to the research site was obtained, and the treatment of the participants follows. Participant stability is explained, including the ability to evaluate participants' stability before they joined this study. Finally, direction for the protection and treatment of collected data and avoidance of potential conflict of interest are provided in this chapter.

Research Design and Rationale

The independent variable for this study was childhood trauma experience levels and the dependent variable was resilience against life challenges. Other variables included the social support theory variable, which was the variable that measured the theory for this study. The control variables were age, gender, education level, and employment status. Conducting this quantitative study required using a correlational design when testing any relationship between childhood trauma experience levels on resilience against life challenges in adulthood. This design helped respond to the study research question to determine to what extent childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) predict resilience against life challenges in adults with mental illness (Curtis et al., 2016).

Other researchers have used the correlational design for testing relationships among study variables. For instance, Kline (2018) used a correlational design to test nurse job satisfaction as the independent variable and the relationship of nurse retention as the dependent variable. Another researcher, Syed (2019), also used the correlational design to test the relationship of food security and household smoking as independent variables on nutritional status as the dependent variable. These researchers demonstrated the effectiveness of the correlational design for conducting the current study. There were no time or resource constraints connected with the correlational design that prevented completion of this study.

Researchers have focused on the outcomes of childhood trauma but have not evaluated the effectiveness of perceived social support in relationships for increased resilience against life challengers for people with childhood traumas. A lack of research in this area demonstrated a literature gap and a need for this study. Using a correlational design was of great benefit for understanding these relationships and for advancement of knowledge in the psychology discipline, thereby helping to close this gap in the literature. Using an intervention or placing participants into random or controlled groups was not appropriate for this study.

Methodology

Population

According to a 2013 study published by the United Nations on world population facts, the world population was then 7.2 billion people. The World Health Organization in 2017 estimated that approximately 576 million people had been diagnosed with some

form of mental illness. According to the last U.S. Census in 2010, the country's population was approximately 309 million people. Calvo et al. (2016) found that approximately 57 million people in the United States have been diagnosed with mental illness. Although the United States had approximately 4.3% of the world's population, the United States has 10% of the world's mental health population. Canady (2020) reported that 20.6% or 51.5 million people ages 18 and older have a mental illness. These findings indicate that mental illness exists in high levels among the U.S. population.

People diagnosed with a mental health disorder remain a vulnerable population in the United States (Downs, 2018). Adults experiencing childhood trauma have a greater probability of developing mental illnesses and may be unable to make proper decisions or understand the depth of their illness (Zarse et al., 2019). People in this population exposed to childhood trauma often have difficulties developing trust in themselves and others. People with difficulties developing trust also have decreased emotional control, increased aggressive actions, and poorly adapted coping skills (Buckley, 2013). Those who do not overcome their childhood trauma are known for experiencing difficulties in dealing with life challenges and are vulnerable to many negative life situations. Studying the associations of childhood trauma on resilience using social support is important for increasing the quality of life for this population.

Sampling and Sampling Procedures

A sample is necessary in social science research because testing an entire population is impractical, unaffordable, and time consuming. It is therefore necessary to choose a sampling strategy that best suits the research design and responds to the research

question (Setia, 2016). Social science researchers have used several methods for collecting samples that allow generalization of results to the population. Seita (2016) posited several sampling methods such as a probability sampling and nonprobability sampling methods such as convenience sampling, snowball sampling, purposive sampling, etc.

Researchers have argued that probability sampling remains the preferred and primary method of sampling in social science research. This sampling method is not always possible or practical, such as when collecting data from people diagnosed with mental health disease who attend a clinic in the midwestern United States. Researchers have argued that using the probability sampling method is based on the probability sampling theory, which is that everyone in a population has an equal opportunity for participating in a study (Jesmani et al., 2020). Choosing participants depends on two major factors: that participants are available to be chosen and that participants are chosen using a random method. Random methods include using a random table or an application for randomization. There was no available list of participants for randomization; therefore, using the random sampling process for the present study was not possible (Jesmani et al., 2020). For the present study, a nonprobability sampling method was chosen.

Convenience Sampling Method

A nonprobability convenience sampling method was the method of sampling used in the present study. According to Valerio et al. (2016), there are several benefits to using a convenience sampling method. These benefits include using existing relationships when

identifying suitable participants and allowing a focus on specific locations, activities, or situations. Valerio et al. argued that this sampling method is also beneficial when there are no available lists of participants to choose from. Additionally, using this method is efficient, less expensive, and promotes faster data collection than other methods of sampling.

There are some drawbacks, however, to using a convenience sampling method, which often pose a threat or create limitations for a study. For instance, Valerio et al. (2016) argued that convenience sampling often leads to collecting samples from a homogenous sampling frame and limits generalizability of results to the population. The method is also viewed as less rigorous if poor procedures and processes are used when collecting data.

Researchers often use the probability sampling strategy, which is a strategy used to randomly chose participants for participation in a study. Many researchers consider the random sampling strategy the most rigorous when conducting scientific studies; however, using this strategy was impractical for the present study because of a lack of available participants to choose from (Jesmani et al., 2020). As such, using the convenience sampling strategy was best suited for collecting data for the current study.

Sampling Procedures

The sampling for this study occurred at a Midwest mental health outpatient clinic. I recruited participants by advertising the study using flyers and posters staged at strategic locations of the data collection site. Recruitment flyers (Appendix A) were placed in the lobby area of the clinic 7 days before beginning the study. The recruitment

flyer provided the study name, the purpose of the study, the targeted population, the period of data collection, and my name as the researcher. Participants who showed an interest in participating in the study were guided to a special area of the site where each potential participant was given a participation package that included an overview of the research with the informed consent form and the survey.

Sample Frame

Assessing the sample frame was useful because of its representativeness of the population (Boyle et al., 2016). The sample frame for this study included clients from a mental health outpatient clinic located in the midwestern United States. These clients were people who reported one or more childhood trauma experiences and were diagnosed and received treatment for at least one mental health disorder.

People in this population often show signs of mood instability. Broome et al. (2015) described psychiatric mood instability as impaired cognitive function, affected valence, intensity, frequency of shift, rapidity of mood shifts and returned to baseline, reactivity to psychosocial cues and the extent of over dramatization (verbal, emotional, behavioral) expression. Participants who demonstrated a groomed and appropriately dressed physical appearance, provided appropriate responses to verbal questions with fluctuations in verbal responses, and who made and maintained eye contact were considered to have psychiatric mood stability and were part of the sample frame. People in the sample frame also had psychiatric mood stability by demonstrating clarity of thought and function, affect consistency, speech tone, and clarity of speech. The frame also included people with mood absent of significant shifts, a lack of dramatization in

their demeanor of verbal, emotional, and behavioral expressions. Finally, the sample frame included participants who were 18 years or older and were male, female, or other. For the present study, psychiatric mood stability of participants was determined by a trained and qualified person.

Power Analysis and Sample Size

Researchers have argued that statistical power is important because power is a function of sample size. Researchers further argue that statistical power is necessary when determining the size of a sample for generalizing about the population based on the results from the sample (Murphy et al., 2014). Murphy, et al. (2014) found that to determine an adequate representative sample size for a population, it is necessary to estimate the size of the associations in a population, known as the effect size, the decision criterion used to indicate statistical significance ($\alpha = .05$) by convention, with a power level of .80. Murphy et al. also found that a power level of .80 or higher indicates that success in rejecting a null hypothesis is four time greater than failure, and a .90 power means that success is nine times more likely than failure (Thomaes et al., 2017).

In 2012, Peng et al. argued that low statistical power and sample size have detrimental associations on the validity of a study's statistical analysis and interpretation. Peng et al. found that approximately eight application tools can be used to calculate power analysis, and G*Power 3.1.9.4 designed for Windows operating systems is a good tool for conducting power analyses. The G*Power software was created by Faul et al. (2007). The benefit of using the G*Power tool is its ability to perform prospective statistical power and observed statistical power.

These described attributes indicate the sufficiency of the tool for calculating the minimum sample size required using a prospective statistical power. When conducting a multiple linear regression analysis, and using a medium effect size, an alpha level of .05, and a power level of .80, with six independent predictors (childhood trauma, social support, age, gender, employment status, and education level), the minimum sample size for this study was 98 participants. Should the sample size be as high as N = 123, and the power level realized was .90, the success increased to nine times more success than failure, when rejecting the null hypothesis if the hypothesis was false.

Recruitment, Participation, and Data Collection

Recruitment

Participant recruitment began with an advertisement flyer for the study and signage announcing the need for volunteers to participate in the study. Advertisements were placed in a conspicuous location in the clinic where potential participants could view it. If clinic clients showed an interest in participating in the study, these clients were guided to a private designated area and received a study package. The package included an overview of the study with an informed consent form and a copy of the survey.

Participation

The informed consent was attached to the outside of a large envelope and was reviewed with the client. The client was informed upon the acceptance of the envelope of implied consent to join the project. The informed consent was provided to the client to review and take with them after the completion of the forms. The envelope contained the demographic questionnaire that requested the participant's age, gender, employment

status, and education level; the ACE questionnaire; the 2-Way Social Support Scale; and the resilience scale. The envelope and all forms were numbered with coordinating numbers to maintain that each participate competed all forms required for this research. When the participant was finished, all forms were returned to the large envelope, which was sealed by the participant. The sealed envelope was placed in a box that had an opening only large enough to place the envelope and maintain participant confidentiality.

Pilot Study

Often when conducting social science studies, researchers conduct a pilot study because of several conditions, such as ensuring the instrument used for data collection is reliable and valid when measuring behaviors and attitudes the study participants (Priyadarisini et al., 2016). Using an already validated survey instrument in this study was intentional because of its high reliability value as measured by the Cronbach alpha conventions (Fraser et al., 2016). The instrument for this study was deemed appropriate for measuring the experiences and attitudes of clients with mental illness who have experienced childhood trauma. Conducting a further reliability test using a pilot study was not efficacious.

Data Collection

Data were collected for this study using a paper instrument. Ivey (2017) argued that conditions of anonymity, confidentiality, and privacy are of paramount importance when collecting data from adults from vulnerable populations who consent to be in a study. Clients from a mental health clinic are vulnerable adults diagnosed with mental illness under control. These participants likely had experienced at least one childhood

trauma. Approval to use the data collection site was given by the management of the clinic (see Appendix H). Data collection was set up in a private area where participants reviewed study materials such as the letter of introduction and the informed consent document; a copy of these documents is in Appendix B.

Providing an introduction and consent letter is a standard practice in social science research; these documents offer a brief explanation of the purpose of the study. Participants read the letter of introduction and the informed consent form. The informed consent form was used for outlining why the study was needed. The section on the voluntary nature of the study provided an explanation of why participation was voluntary and their options of stopping or leaving the study at any point without penalty of any kind. It was important that participants understood that participation in the study may cause some people minor stress, though rare, because this population is prone to stress development. Participants were advised to reduce their stress by stopping participation at any time.

Benefits of being in the study, such as understanding the relationship of social support, were explained so that participants had a real sense of purpose by being involved in a study. Because of the voluntary nature of the study, compensation was not forthcoming, but appreciation for their participation was expressed. Participants were informed of the confidential nature of their responses and participants were ensured their information would not be used outside this study. I also provided contact information in case there were questions related to the study or in case any issues arose from their participation in the study.

Participating in the study occurred when participants filled out a paper survey (Appendix C). Participants were instructed to read each document and complete the survey by reading questions and then providing an appropriate response by choosing a number on a scale that represented their level of attitude or behavior. Participating in this study took approximately 10 minutes or less; however, participants had as much time as needed to complete the study before putting their survey in a receptacle.

This type of study does not require any follow up process or that participants return for another interview. After completion the last question on the survey, there was a message thanking participant for their participation in the study. Participants were requested to seal the survey in the envelope and placed the document in a receptacle provided. Participants were accompanied as they exited the data collection area. This action indicated the end of the data collection process for participants.

Instrumentation

The instrumentation for this study was the Childhood Trauma and Resilience Instrument (see Appendix C). The instrument included three validated scales that are: (a) the ACE instrument, (b) the 2-Way support scale, and (c) the resilience scale. A detailed discussion of each scale follows.

The ACE Instrumentation

The ACE Study Questionnaire was utilized for measuring the childhood trauma experiences variable for this study. The ACE Study Questionnaire (Felitti et al., 1998) was created to measure the severity of childhood trauma among adults in the first 18 years of life. The questionnaire included four dimensions when measuring childhood

trauma which were (1) emotional trauma, (2) physical trauma, (3) sexual trauma, and (4) dysfunctional household experiences. The ACE Study Questionnaire consisted of ten questions with yes or no answers. The yes answers are scored at 1 point, and no answers receive 0 points. After the completion of the questionnaire, the total was calculated. A total score of 0 indicated no trauma while 10 indicated trauma in all categories. Higher scores indicated a greater exposure to childhood trauma while lower scores indicated fewer exposures to childhood trauma. A copy of the ACE Study Questionnaire is in Appendix C.

The scale showed an acceptable level of reliability (Alpha = .81) using the Cronbach's rating (Schmidt, 1996). The ACE Questionnaire has been used on adult populations in studies related to social services, health care, education, justice, and legislators to determine childhood trauma outcomes (Zarse et al., 2019). This ACE questionnaire was utilized in 134 studies of which researchers in 44 studies observed adults in medical clinics, similar to the sample in the present study among other populations (Felitti et al., 1998). None of the researchers reported negative outcomes among the participants with mental illness or for those who did not have mental illness.

In another study, Felitti (2012) stated that during the first ACE Study (N = 17,000) participants showed no symptoms of instability or profound disturbance during the study. There was also no report of people experiencing mental episodes or becoming emotional such as showing anger during the study. The ACE study was incorporated during usual medical exam for all clients. Additionally, Becker-Blease et al. (2006) argued that it was important to ask patients about their history of childhood trauma

experiences to determine patient's risk of having other psychiatric diagnoses. The ACE study provided strong evidence of associations between early traumatic experiences and some major public health problems. This instrument was actively used in all psychiatric and mental settings; as such, this tool remained a relevant tool when studying adult population who experienced childhood trauma. Permission to use the ACE Study Questionnaire is in Appendix D. Following are discussions on the 2-Way social support scale used for measuring social support received by adults with mental illness.

The 2-Way Social Support Scale

The 2-Way social support instrument was used to measure social support in this study. This scale was suitable for measuring social support in adults with mental health disease who experienced childhood trauma. The scale was created using an initial pool of 56 items from a content analysis of measures of social support. The first social support measures were initially tested on (N = 436) undergraduate students who attended a college in Queensland, Australia (Shakespeare-Finch et al., 2011). The results of this study showed that giving and receiving social support was a key outcome of well-being among participants.

The 2-Way Social Support Scale included four dimensions that were (1) emotional support with seven items, (2) giving support with five items, (3) instrumental support with four items, and (4) physical support with four items (Shakespeare-Finch et al., 2011). Shakespeare-Finch and Obst (2011) defined emotional support as giving advice, comfort, and sharing with another while instrumental support included helping with a task, lending money, and giving information. Each question had six responses

ranging from 0 to 6 where a 0 indicated not at all and a 6 represented always. Participants were to choose their responses to what they believed to be the most common in their present experience. A score of three or above indicated higher levels of social support.

Dimensions in the 2-Way social support construct was reliable ranging from a low of alpha of .81 to high of .90. The overall Cronbach's alpha average was high (a = .86). The 2-Way social support scale was considered a psychometrically effective instrument with good reliability and validity in many studies (Schmidt, 1996). This 2-Way social support scale had been used when studying adult populations and consent to use this 2-Way social support scale for studying adults with mental health disorder is in Appendix E. Following are discussions on the resilience scale used for measuring resilience against life challenges in the present study.

Resilience Scale

The resilience scale was used for measuring resilience variable for this study among clients who were diagnosed with mental health diseased and experienced childhood trauma. This scale was created by Connor-Davidson (2003) and called the Connor-Davidson Resilience Scale-10. This scale includes a 10-item questionnaire for measuring psychological hardiness and overall toughness when dealing with life challenges. The had 10 items with seven possible responses ranging from 0 to 7 where a zero indicated not true and a 7 indicated true nearly all the time. The highest possible score was 70, which was high resilience. The lowest score was zero, which was low resilience.

The reliability score as measured using the Cronbach's alpha coefficient (a = .85) was high, which demonstrated good internal consistency (Schmidt, 1996). Researchers utilized this scale when studying adult populations without any adverse outcomes reported. Researchers used this construct when observing participants from several studies that included trauma survivors, Alzheimer care providers, elders, and persons diagnosed with PTSD. The appropriateness of using the ACE questionnaire, the 2-Way social support, and the resilience scale were determined by previous studies used only in adult populations that were exposed to trauma. Consent for the use of the Connor-Davidson Resilience Scale-10 is in Appendix F. Following are discussions on the operationalization of the scales used in the present study.

Operationalization of Scales

Measuring Severity of Childhood Trauma

Measuring the severity of childhood trauma required utilizing the ACE questionnaire, which was created by Felitti et al. (1998). The scale used for measuring severity of childhood trauma was a continuous scale ranging from 0 and 1 where a zero indicated no experience with the specific childhood trauma and a 1 indicated experience with the specific childhood trauma. This scale included 10 questions and was a continuous measure. Utilizing this the scale allowed conducting measures of central tendencies for analysis such as calculating a mean, median, or mode scores. Calculating scores for each participant was by totaling the severity score for each question. A highest score possible was 10 and the lowest score possible was zero for this construct. Calculating a mean score for this scale was by totaling all scores and then dividing by the

total number of questions for those who experienced trauma. A median score indicated the value where 50% of the level of were above the median value and rest were below the median value. These scores were not subjected to outliers, whereas mean scores were subjected to such deficiencies. A mode score provided information on the most popular level of severity experienced among the sample (Kuna-Broniowska & Smal, 2017). Utilizing this scale in its index form was highly suitable, particularly when conducting a regression analysis model on a continuous measure criterion variable. The following discussion is on the operationalization of the perceived social support construct.

Measuring Perceived Social Support

Measuring perceived social support was by using the 2-Way social support scale, created by Shakespeare-Finch (2011). The 20-item scale was used for measuring perceived experiences of social support from others. The scale was an index type scale ranging from 0 to 5 where a zero indicated the lowest level of perceived social support experienced and a five indicated the highest level of perceived social support experienced by participants. Calculating a score was by summing the index score from each item dividing the score by six to find a mean value. Scores above 2.5 was considered high levels of social support and scores below 2.5 was considered a low level of social support.

Participant scores from this continuous measure variable allowed calculating measures of central tendencies such as a mean, median, mode, standard deviation, range, and so forth. Researchers found that these types of measures were for providing typical responses in a sample, which represented typical experiences in a population.

Researchers also argued that measures such as a mode were easily obtained and provided ease of interpretation ((Tatliyer et al., 2019).

Although the mode was easily derived, there were some disadvantages associated with the statistic. First, while providing the most popular response, there was not much descriptive information from that data just based on the mode value. Secondly, the mode was not always unique because often, there were multiple responses that were popular responses, which created a bimodal response. Notwithstanding these problems the mode was a widely used statistic for explaining behaviors and attitude in social science research (Lucien, 2015). For the present study, a mode value was to indicate the most popular level of perceived social support among participants.

Researchers such as Mishra et al. (2019) argued that the median score was beneficial for describing the middle scores of data. Creating a median score was by finding the middle value. If there was not one middle value, the average of two middle values will become the m median value. This was often known as a rough median compared to the exact median. Kuna-Broniowska and Smal (2017) argued that a median score provided information such and the perceived level of social support below and above the median score and that these scores were not subjected to outliers. Following are discussion on the operationalization of the resilience scale.

Measuring Resilience

Measuring resilience against life challenges was by using the resilience scale created by Connor-Davidson (2003). The 10-item index scale has a range from 1 to 7 where a 1 indicated the lowest level of resilience to life challenges and a 7 indicated the

highest level of resilience to life challenges. The lowest score possible for this scale was 10 and the highest possible score was 70. When participants had a score that was less than 35, this was considered a low level of resilience. When participants have a score that was greater than 35, this score represented a high level of resilience against life challenges. This continuous scale score allowed providing measures of central tendency among the sample, similar to what was described for previous scales. Since the scale was continuous, conducting statistical models such as multiple linear regression (MLR) analysis helped when understanding the association of predictor independent variables on this criterion variable. Following are discussions on the data analysis plan for the present study.

Data Analysis Plan

Data collection began with using the Childhood Trauma 2-Way Support and Resilience Instrument for collecting data from each participant in the study. Data were transferred to the Microsoft Excel spreadsheet for data cleaning process. Coding variables were by using an alpha numeric code for each variable and item. For instance, the coding the resilience variable was by using RES1, RES2, RES3, and so on. The letters represent the first three letters of the variable and the number represented each item. RESTTL was the alpha code for the total score of the resilience scale. Whereas this process was beneficial for creating a dataset that was analyzed using the SPSS Version 25 software. There are many statistical applications that are utilized when analyzing electronic data such as SAS and IBM SPSS (Bruland & Dugas, 2017). Using the SPSS application was

therefore useful because of the availability of the software and the ability to use the software effectively for analysis in this study.

Data Cleaning and Screening

Data screening and cleaning involved optically scanning the returned questionnaires by screening questionnaires for completeness. If participants failed to complete at least 85% or more of the survey, these cases were set aside as incomplete and was not used in the study (Takahashi et al., 2017). Finally, questionnaires where participants completed 85% or more of the study were included in the results of the study. Imputing a mean for each missing response was the standard and accepted way for accounting for these missing data without significantly changing the outcome of the study. Takahashi et al. (2017) argued that collecting data using surveys generally resulted in missing data. These missing values often created a bias in the results of the study if left unchecked. These researchers proposed that rectifying this problem was by using the imputation of a mean strategy. According to Takahashi et al., the assumption however was that data must be normally distributed. When data cleaning was completed, the database was transferred to the SPSS application for analysis.

Research Question and Hypotheses

RQ: To what extent do childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment), (control variables) predict resilience against life challenges in adults with mental illness?

H_0: Childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) do not predict

resilience against life challenges in adults with mental illness, and all beta values were equal to zero ($\beta = 0$).

H_a: Childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) do predict resilience against life challenges in adults with mental illness, and not all beta values were equal to zero ($\beta \neq 0$).

Statistical Analysis Plan

Conducting this study required engaging the multiple regression statistical model to analyze the hypothesis and answer the research question. Researchers such as Tatliyer et al. (2019) utilized the multiple regressions model to predict the live body weight of sheep using predictors based on using correlated variables. The following plan included various types of analyses presented in this study along with a strategy for rejecting the null hypothesis if false, and then responding to the research question. The first type of analysis discussed was the descriptive portion of the results. The next portion of the analysis included the interpretation of the multiple linear regression analysis including a summary of all graphs and tables in the results. The descriptive analysis plan is next.

Descriptive Analysis

The plan for presenting descriptive analysis results included summarizing these results using tables and providing charts such as line graphs, box plots, and pie charts for graphical representation of the data. Continuous data results included measures of central tendencies, skewness, range values and so on. Results for nominal variables included frequency values and modal information where necessary. Results for ordinal data

included some frequency results and along with the order of values from the lowest to the highest values (Mishra et al., 2019).

Multiple Regression Analysis

Researchers have agreed that the MLR analysis was one of the most popular statistical models of estimation utilized in social sciences. Using this model was to determine the association of individual relationship between predictor variables and dependent variable. The model was utilized to create an equation that best described the associations of the predictors on the criterion variable ($Y = a + \beta 1X1 + \beta 2X2 + \ldots. + \beta kXk + \varepsilon$). The Y was the dependent variable or criterion; the a was the constant value at base, $\beta 1$ was the independent beta value of each predictor; and X was the predictor variable (Tatliyer, Bas, & Yagci, 2019). Assumptions for conducting the multiple regression analysis was that each independent predictor had a linear relationship with the criterion, therefore E(Y) and each Xk was linear. All observations were independent of each other, and that the distribution was normal (Mishra et al., 2019).

The analysis began with creating correlations matrix to assess each variable showing a linear relationship with the dependent variable. A summary of the matrix was for providing all results together. Variables with a linear relationship with the independent variable were then moved into a stepwise forward model for analysis. The results in the table indicate if the model was significant for predicting resilience.

If the p-value was .05 or less, the model was significant and the null hypothesis was rejected, thereby accepting the alternative hypothesis. The inverse was also true. If the p-value was greater than .05, the null hypothesis was retained, and the alternative was

deemed false (Mishra et al., 2019). If the model was significant, other statistics of the results were worth analyzing. For instance, the R2 estimated the variance explained in the model for resilience. As an example, if R2 was .52, this indicated that 52% of the model was explained using these predictors, but 48% of the model was unexplained (Jurs et al., 2018). Results from other statistics such as effect size, the observed F statistic, degree of freedom (df), and the significance level were reported as part of the final analysis of the model.

In addition, the predictor model results included values of the unstandardized regression coefficients (B), the standardized regression coefficient (β), the observed tTest value from the paired samples t-test (t), the significance value for each t-test (p), and the 95% confidence interval (CI) for each beta (Lee et al., 2019). These results summarized in a table were for presenting and supporting a comprehensive assessment of the analysis. Finally, the research question was addressed using the results of the analysis. The following section are discussions on threats to the validity of the results of the study.

Threats to Validity

All researcher needed to address threats to validity of results in a study. Not all threats to research are relevant to every study. For the present study, there were threats to consider. These threats were categorized as internal threats and external threats validity. Discussions about these threats to validity are provided next.

Internal Threats to Validity

Internal threats were mostly of concern when conducting experimental research. The present study did not include an experimental design and therefore only the threats

that affected a correlational design were addressed. The internal threat to validity that mostly affected correlational studies were ambiguity about the direction of causal influence.

Researchers argued that a threat of this nature was not common among correlational studies because results from correlational studies were not always clear as to causal relationships found in the study. Conducting a correlational study did not determine cause but rather was to determine any relational association in the study where a third variable may have influenced the relationship between the independent variable and the dependent variable. The design was to determine if there was a relationship between childhood trauma experiences and resilience, and whether social support had an association, if a relationship exist. The design was not to indicate causal association between childhood trauma experiences and poor ability to achieve resilience.

The goal in this study was to determine if childhood trauma, social support, and demographic variables had a predictive relationship on resilience for people with mental illness. The threat to validity was related to the population in that participants for this study were people with mental health disorder and who may not have fully understood questions on the survey. A mitigation factor was using a large sample size so that unaligned surveys would not have a negative outcome on the validity of the study.

Construct Validity

Threats to construct validity is a type of internal validity, which involved discussing the degree to which variables were related to each other in terms of a theoretical relationship. For the present study, experiences of childhood trauma were

related to resilience against life challenges for people who were not diagnosed with mental illness disease (Feeney & Collins, 2014). Therefore, a theoretical relationship existed in other populations before conducting this study. Additionally, in other studies, there were relationships established between social support and resilience for people who were not diagnosed with mental illness, demonstrating a theoretical relationship within the framework of the present study (Begun et al., 2018). These findings demonstrated that a system of relationships existed in other populations, and therefore construct validity existed for this study among variables.

External Threats to Validity

Statistical Validity

Statistical reliability is a type of threat in external validity, which involved experiences of participants that often threaten the ability to make inferences from data provided by participants (Belin, et al., 2018). An external threat involved analyzing scores of tests and demographic information and incorrectly inferring relationships when no relationship was present. Alternatively, when analyses done was not able to determine that a relationship was present. This type of threat was defined as a statistical conclusion validity threat (Belin, et al., 2018). An example of threats to conclusion validity in the present study is concluding that participants with no trauma history were the only participants who experienced developed resilience. To mitigate against this type of threat, it was necessary to collect data from a sufficiently large sample size so that making inferences from results from the sample about the population was possible and reasonable.

Statistical Analysis

Statistical analysis was another type of threat to external validity for the present study. Conducting this study required using the multiple regression analysis, which provided sufficient depth of analysis for predicting resilience against life challenges (Tatliyer et al., 2019). The results of these statistical test provided conclusions analyzing stated hypothesis and responding to the research question. Conducting this type of analysis was common when conducting social science research (Tatliyer et al., 2019). The multiple regressions analysis results of the present study supported the outcome of the study and provided a high level of validity. Following discussions are on the ethical procedures implemented in the present study.

Ethical Procedures

Access to Research Site

Conducting this study required having access to the research site for data collection. A written request and approval was obtained for access to the research site and a copy of the approval is in Appendix H. Granting of institutional review board (IRB) permission was a requirement before beginning data collection for the proposed study. The IRB approval number is 07-02-20-0144989. There was no IRB approval required from the research site, however, a copy of the approved proposal was available upon request to this manager of the research site. There were several ethical concerns related to data collection and the protection of human subjects. The following discussions are on the treatment and storage of data collected and addressing conflict of interest in the study.

Treatment of Human Participants

Participants for this study included people diagnosed with a mental health disorder, who attended an outpatient clinic because their mental health status and were stable and controlled with medication and or therapy. The IRB was consulted since these participants were part of a vulnerable population due to mental illness diagnosis (Downs, 2018). Participating in the study was therefore by participants who volunteered for being in the study were visibly mood stable at the time of participating in the present study. Broome et al. (2015) described mood stability as not experiencing impaired cognitive function, no affected valence, and no intensity or frequency of shift. Stability also included no rapidity of mood shifts and no over dramatization (verbal, emotional, behavioral) expression during data collection.

Qualifications of professionals who determined psychiatric stability was set by the American Psychiatric Nurses Association (APNA) (2017). These qualifications included having a Master of Science in Nursing (MSN) Psychiatric degree and a Psychiatric Mental Health Clinical Nurse Specialist, Board Certified (PMHCNS, BC). These advanced practice registered nurses (APRN) assessed, diagnosed, and treated individuals or families with psychiatric disorders. These professionals identified behavior risk factors for such mental health disorders (APNA, 2017). As a highly qualified, experienced, and capable mental health professional, it was necessary to assess participant's mood stability at the research site prior to data collection for the present study. Present qualifications included 40 years in the nursing field along with 18 years of psychiatric nursing experience with PMHCNS, BC certification. These certifications and qualifications

allowed determinations of visible mental health stability. These assessments included indications of clarity of thought and function, affect consistency, speech tone, clarity, and mood absent of significant shifts. Other assessments included determining a lack of dramatization in participants demeanor of verbal, emotional, and behavioral expressions.

Participants in the study did so voluntarily and were permitted to end participation at any time during the study without any consequences. Researchers have demonstrated that the completion of the survey did not significantly increase any risk of mental instability or distress to mental health patients (Felitti, 2012). Most participants at the research site completed assessments such as ACE assessment during an initial assessment. In the present study, there were no cases where participants experienced adverse conditions during the study. In such cases of adversity, there were immediate mental health interventions available on site. Accessing mental health interventions was by verbally calling for available staff and requesting an emergency crisis assessment, which would occur directly at the site. This intervention would include a mental health assessment completed by a therapist, case manager, or nurse practitioner. These mental health professionals working at the site were qualified in determining the best plan of care, which may include therapy, medication modification, or psychiatric hospitalization.

Facility

The research site was an out-patient clinic where clients of the clinic were stable enough to live in the public without fear of them hurting themselves or others. A crisis routine was established by the mental health facility to treat clients who experienced mental health episodes. If a participant became unstable during the current study,

assistance from mental health professionals at the clinic were available to rapidly respond, intervene, treat, and hospitalize clients, as necessary.

Responding to Unstable Client Procedure

The planned procedure for responding to clients who become unstable at the outpatient mental health facility was broadcasting a code H for help. All staff (psychiatrists, nurse practitioners, nurses, case managers, therapists, social workers, and security) immediately were to render aid to the unstable clients. Mental health professionals had previous training and drills on this procedure and was capable of determining the level of treatment required to stabilize any unstable clients.

Previous researcher have conducted research among participants diagnosed with mental illness who were stable at the time of the study. McClure (2017) successfully conducted a study among U.S. veterans with mental health disorders such as PTSD or anxiety disorder. Simonson (2015) also conducted a study using patients from an outpatient mental health facility in the Midwest region of the U.S. Simonson specifically found that although participants experienced co-occurrences of substance use and mental health disorders, there were no instances of instability reported among participants during the study. These researchers demonstrated that although participants were diagnosed with mental health disorders and were stable at the time of the study, it was possible to conduct studies among this population.

Anonymity of Data

Beginning data collection required that researchers be adequately trained in the protection of human subjects when conducting research by a supervising university. The

National Institutes of Health (NIH) Office of Extramural Research was the institution chosen by the supervising university for obtaining the necessary skills required. Certification that training was completed was by the issuance of a certificate (No. 2198813) issued for this skill requirement, a copy of which is in Appendix G.

Data collected for this study was in the form of paper questionnaires. Ensuring anonymity was first by ensuring that there was no identifying information collected about participants. As such, there were no questions that asked for participant's name, address, email address, or phone number. Each completed questionnaire was assigned a three-digit case number starting with zero, zero, one (001) and numbering would end at the highest number of collected questionnaires. Participants placed their completed questionnaires in a private data collection box after completion of the questionnaire.

Confidentiality of Data

Collecting data from participants required keeping data anonymous and confidential. There was no known relationship that threatened confidentiality with any participant. In any event, researchers are bound by confidentiality agreements not to disclose any known information about any participant (Eberlen, et al., 2019). Upon the completion of data collection, all surveys were moved to the privacy of a residential property where these surveys were then secured. After converting the paper surveys to an electronic database, these surveys were then placed in a locked file cabinet in a plain manila style envelope. The electronic form of the surveys was then secured on a portable computer storage drive that was password protected. It is necessary to maintain data on a storage drive together with the paper surveys for five years, after which these are to be

destroyed. Destroying the paper surveys was by shredding and dumping, using an electric paper shredder before dumping. The data on the electronic storage drive shall be destroyed by formatting the drive, thus destroying, and making the data unavailable to anyone.

Conflict of Interest

Inviting participants with knowledge and experience in having resilience against life challenges when experiencing childhood trauma who were diagnosed with a mental health condition was justifiable when studying learning outcomes related to the resilience building phenomenon. McGinn (2018) argued that demands in ethical practice when conducting research included addressing potential risks associated with participants so that study results and outcomes were not manipulated by conflicts of interest. McGinn argued that conflicts occurred when studying participants from a professional practice where these participants remained unaware of the researcher's personal benefit associated with their participation in the study.

Avoiding similar conflicts of interest in this study was of paramount interest. As such, all steps were implemented to avoid any covert or overt conflicts of interest. Recruiting participants for this study did not involve any were past or presently known clients. To avoid this situation, it was necessary to obtain permission to recruit potential participants from a clinic that was not associated with any present or past professional experiences. Doing this avoids any covert or overt conflicts of interest for this study.

Summary and Transition

In this chapter, there were discussions on the methodology and design for conduction of this study. After the introduction section there were discussions on the research design and rational for choosing the design. The correlational design was the design of choice because of the ability to analyze relationships among study variables. Discussions also focused on why other designs were not appropriate for conducting this study. In the methodology section were discussions on the population, the sample, and sampling procedures for this study. After estimating the population size based on empirical studies, discussions centered on the strategy for choosing a sample for the study. The convenience sampling strategy was the final choice, with discussions on why other methods were not chosen. After a discussion on defining the sample frame for this study, there were discussions on the required sample size needed for conducting this study.

A power analysis was conducted using the G*Power application, and parameters for the analysis were clearly defined. This analysis yielded a required sample size (N = 98) for avoiding a Type I or Type II error during analysis. The procedures for recruitment, participation and data collection procedures followed. The plan for recruiting participants were stated along with the requirements for participating in the study. Participating in the study also required discussing the process of providing informed consent, and the entire process of filling out the study questionnaire. There was no pilot study planned for this study and there were discussions on why this process was not necessary.

Outlining the data collection process was necessary; therefore, discussions provided information on each document included in the study package. The documents included the introduction with the informed consent form and the paper survey form. Discussions of each section of the informed consent form provided comprehensive details for taking the study. Information specifically included the voluntary nature for participation, how participants may leave the study, and the requirement of providing anonymity and confidentiality when participating in the study.

A detailed discussion of the intended instrumentation for this study ensued. The childhood trauma instrument consisting of three validated scales were ventilated with reliability measures provided. Discussion of each scale described the development of the scale along with how each scale were operationalized. This operationalization included manipulation techniques and the process for determining scale scores. The data analysis plan eventuated with discussions on the analysis software chosen for data analysis. Arguments were provided for data cleaning and screening processes as appropriate. There was a reminder of the research question and hypothesis and the plan for analyzing the question. The regression analysis model was chosen because of its predictive strengths for testing the hypothesis and making decisions about the research question. There were also discussions on how the results were to be interpreted and presented after analysis.

Successive discussions included any threats to the validity of the study and the ethical procedures for conducting the study. There were two types of threats discussed in the section that included internal threats and external threats. Discussions about internal threats centered on clarity related to causal relationships as are commonly found in

quantitative studies. This threat was ventilated with arguments such seeking relational associations among variables rather than cause and effect. Seeking cause and effect remained a weakness but was not the goal of the study. External threats were related to environmental situations that possibly affected the outcome of the study. There was no environmental situation identified that threatened the validity of the study other than abilities of attributing behaviors found in the sample to the population. Such abilities were forthcoming because of the sample size requirements planned for during data collection.

Discussions in the final section of the document was on the ethical procedures associated with receiving IRB approval before conducting this study. The main areas of concern were the protection of data and the protection of human subjects when collecting data. Plans for protecting data were preceded by with validation of training for collecting data from human subjects as approved by The National Institutes of Health (NIH) Office of Extramural Research. These discussions also included how anonymity and confidentiality were achieved, such as not collecting personal information from participants. Plans were laid for protecting collected data from unauthorized access and use, and for storing the data for five years. Protecting the integrity of the data in the study required that there be no conflicts of interest between participants and researchers. As such, any possible situation for such conflicts of interested were proposed. As such, there were no conflicts of interest realized. The follow discussions are on Chapter 4.

In Chapter 4, deliberations include a restatement of the purpose of the study, the research question, and hypothesis. Since there was no pilot study associated with

conducting this study, there are no discussions expected in this area. Discussions are on the actual process of recruitment and any variance from the planned process, which also included findings on the time frame for collecting data and response rates as observed. The results of the study included a descriptive analysis supported with graphs and tables for summarizing results, thus making inferences about the population. Such results provided information such as demographic characteristics of the study sample. Discussions were associated with proportionality as related to the population, which provided details of population behaviors and attitudes based on sample results. Finally, presenting results from a regression analysis model test related to the research hypothesis were for determining answers about the research question. Chapter 4 is next.

Chapter 4: Results

Introduction

The purpose of this quantitative correlational study was to test predictive relationships between levels of childhood trauma experienced, social support, and demographic variables and resilience against life's challenges for people with mental illness. The independent variable was levels of childhood trauma and the dependent variable was resilience against life challenges. Demographic variables included age, measured in years; gender measured as female, male, or other; education measured by levels of education completed; and employment status measured as employed, unemployed, or volunteer. The Barnes social support theory (1954) was a foundational variable for this study.

Chapter 4 contains discussions on the recruitment time frame for collecting data and any variance from the planned process. The results of the study include a descriptive analysis supported with graphs and tables for summarizing results and an analysis of assumptions and goodness of fit for using the results of the study for making inferences about the population. Discussions were associated with proportionality as related to the population, which provides details of population behaviors and attitudes based on sample results. A regression analysis model was used for assessing the hypotheses and answering the research question.

Research Question and Hypotheses

RQ: To what extent do childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) (control variables) predict resilience against life challenges in adults with mental illness?

H_0: Childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) do not predict resilience against life challenges in adults with mental illness, and all beta values are equal to zero ($\beta = 0$).

H_a: Childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) do predict resilience against life challenges in adults with mental illness, and not all beta values are equal to zero ($\beta \neq 0$).

Data Collection

This study included adult participants who were diagnosed with at least one mental illness disease, with visible mood stability, who were exposed to childhood trauma and live in the United States. The time frame for data collection occurred over 7 weeks from July 16, 2020, to August 27, 2020. All participants were informed of the study from signage at the clinic's check-in window and a general announcement made when clients entered the lobby. No clients were individually approached to join the research. All clients who attended this clinic independently approached the researcher to volunteer to join the research. No clients who volunteered to join the research were excluded. No discrepancies occurred in the data collection process. The participants were

representative of the mental health population in one Midwest city and comparative to the overall population nationwide.

A minimum sample size required for the study was 98 participants using a power level of .80, a medium effect size, and an alpha level of .05. Completed, the sample size for the study was more than required (N = 109). Some participants only completed 50% of the survey, and these responses were eliminated and treated as nonparticipants. The rest of responses were eligible for analysis, and after data preparation procedures were completed, the sample size for the study was still more than required (N = 109).

Descriptive Analysis of the Sample

Following is the analysis. The first section includes discussions on the descriptive analyses of all study variables, showing the aggregated attitudes and attributes of the sample from several perspectives. These analyses include supporting graphs and charts where applicable for supporting each variable analysis. No inferential analyses were planned or conducted as part of the descriptive analyses; therefore, descriptive results are not provided to infer statistical significance. Next is the analysis of the research question and the decision of the hypotheses. The final section includes a summary of the analysis and conclusion.

This analysis included participants who provided consent for participating in the (N = 109). Data were collected at the research site over a 7-week period. A consent form was provided for participant review, and participants were allowed to retain a copy of the form but were not required to sign the form. Providing consent occurred simply by participating in the study; participants had the option to stop their involvement in the

study at any time without fear of retribution. A small number of participants did not complete the study (n = 4); however, these uncompleted surveys were not included in the final study analysis.

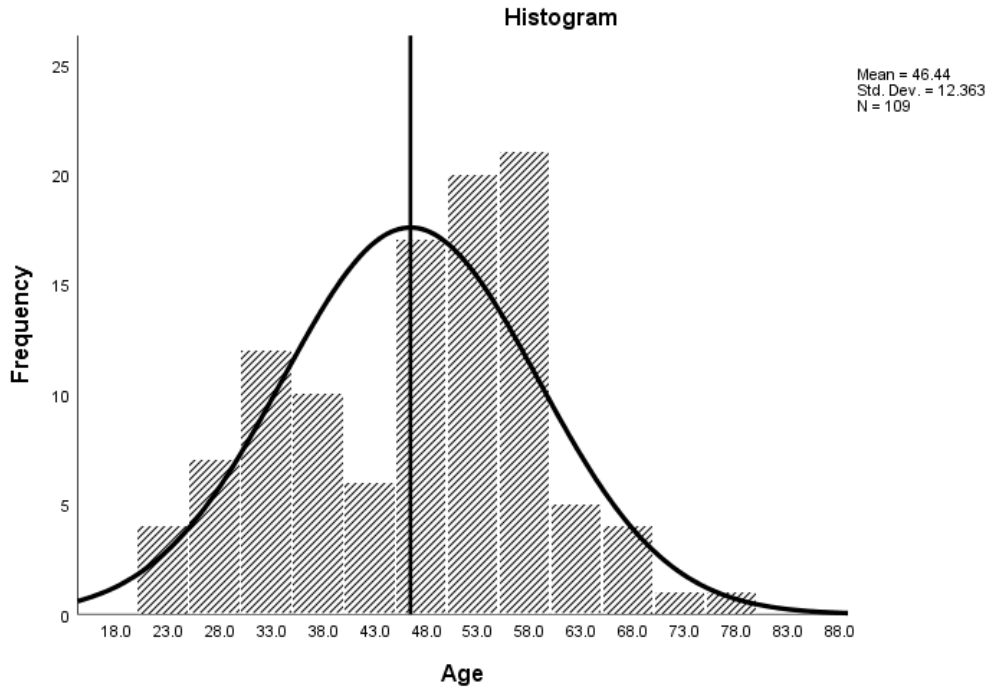
Summary of Variables

Age of Participants

Participants' ages ranged from 19 to 78 years (N = 109), a range of 59 years. Participants' average age was relatively young (M = 46.44, SD = 12.36), which indicated that a majority of participants' ages (66%) were between 35 and 59 years. The distribution of ages indicated there was a small difference between this sample's mean age and the population age (SE = 1.18) and demonstrated that this sample's mean age was closely aligned with the ages of people in the study population. Approximately 50% of participants were above 49 years, but the results showed that both ages 49 and 56 were bimodal. Few participants were under age 25, and these participants made up 5.5% of the sample (n = 6). Participants between ages 26 and 50 made up 52.3% of the sample (n = 57). The rest of the sample were 51 to 78 years old.

Figure 2

Dispersion of Participants' Ages

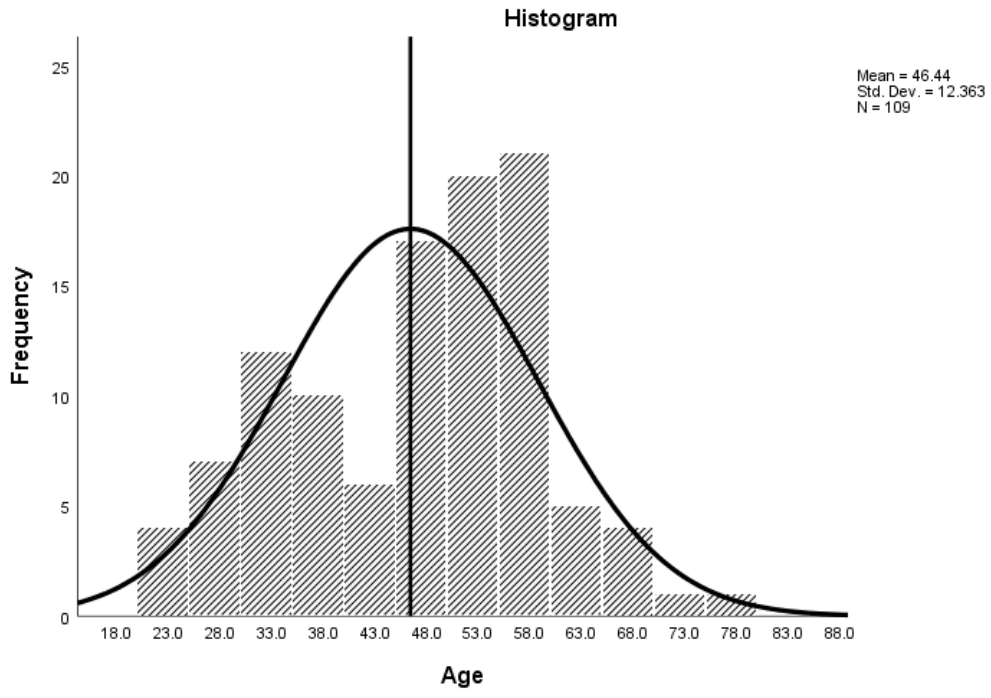


For external validity, this research population was compared to the Ohio and United States population using the Ohio 2018 Mental Health National Outcome Measures (NOMS): SAMHSA Uniform Reporting System by the U.S. Department of Health & Human Services (2019). This mental health was comparable ant the reports defined the Ohio mental health population of ages 18-24 years 10.3% versus 10.3% across the United States and ages 25-64 as 57% of all mental person versus 57% of all reported states in the US. 65-75+ years 3% versus 5% Ages 18 to 44 years of age revealed 45% in Ohio while 42% US. The participants' ages were comparable to the Ohio population and the nationwide population. The histogram in Figure 3 shows a distribution of participants' ages. The mean value is demonstrated by the solid black line. The distribution accounts

for participants from 18 to 88 years; however, results show participants were slightly older than the minimum age and not as old as the maximum age of the scale. The histogram further shows the skewness of the distribution was –.29, demonstrating that although many participants' ages were to the right of the mean age, most values on the distribution fall within the bell curve and there was no clustering. These results demonstrate normality in the distribution. Further, the Kurtosis value of –.48 also demonstrates limited values in the tails of the bell curve and validates normality in the distribution of ages in the sample for people diagnosed with at least one mental illness. A summary of scores for this variable are in Table 1.

Figure 3

Histogram of Trauma Level Distribution

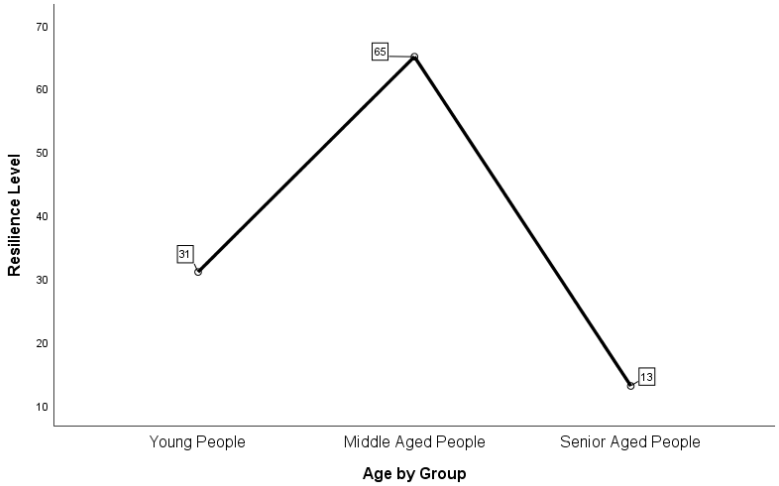


Age Variable on Resilience

The graph in Figure 4 demonstrates the resilience of participants based on age. No research questions or hypotheses required any significance test among these study variables. As such, these analyses are descriptive for the current study. The line graph shows that younger people (18–38 years) reported approximately 43% level of resilience as they become adults; however, as their ages increased to middle age (39–58 years), their level of resilience increased to a maximum level of approximately 93%. The graph also shows that, as people advanced in age beyond that midpoint, their level of resilience dropped sharply (19%). These results indicate that when people are younger, they are better able to cope with life's challenges and grow to strong levels of resilience as they mature. As people approach retirement ages, their levels of coping seem to drastically reduce to a low level. The histogram found in Figure 4 demonstrate the dispersion of ages in the sample, showing a symmetry in the distribution of ages.

Figure 4

Line Graph of Resilience Based on Age



Trauma Level Variable

The ACE study questionnaire was used to measure childhood trauma levels for participants. The average level of trauma (M = 1.62, SD = 1.17) indicates that approximately 66% of participants experienced between one and three levels of trauma in their childhood. The survey instrument measured 10 levels of trauma with a minimum trauma level of zero. A zero level of trauma was modal, while the highest level of trauma reported was five, also indicating a range of five. The median value of 1.5 indicated that approximately 50% of the sample experienced more than two levels of trauma, while the rest experienced less than two levels of trauma. The standard deviation of each possible sample mean (SE = .11) from the population showed small variations.

The 95% confidence interval (CI) showed for people who experienced trauma in the population that people would experience between one and two levels of trauma in their lives (CI = 1.40 to 1.84). Approximately 18% of all participants reported a zero level of trauma (n = 20), which also indicates that 82% of participants experienced some level of trauma. Approximately 30.3% of participants reported experiencing one level of trauma (n = 29), and approximately 25.7% of all participants reported experiencing two levels of trauma. Approximately 1 in 4 participants (26%) reported experiencing at least three levels of trauma or higher.

No one reported experiencing more than five levels of trauma, providing for a range of five. Figure 2 shows relatively normal distribution of the data among those who experienced trauma. The skewness of .56 was small and on the left side of the mean. This indicates that most of the trauma experienced was less than the mean value, but the scores

were symmetrical in the distribution. The kurtosis value of –.35 was also small, which reflects thin values in the tails of the distribution. This low level of clustering in the tails of the distribution further indicate normality. A summary of results for this variable is in Table 1.

Social Support Variable

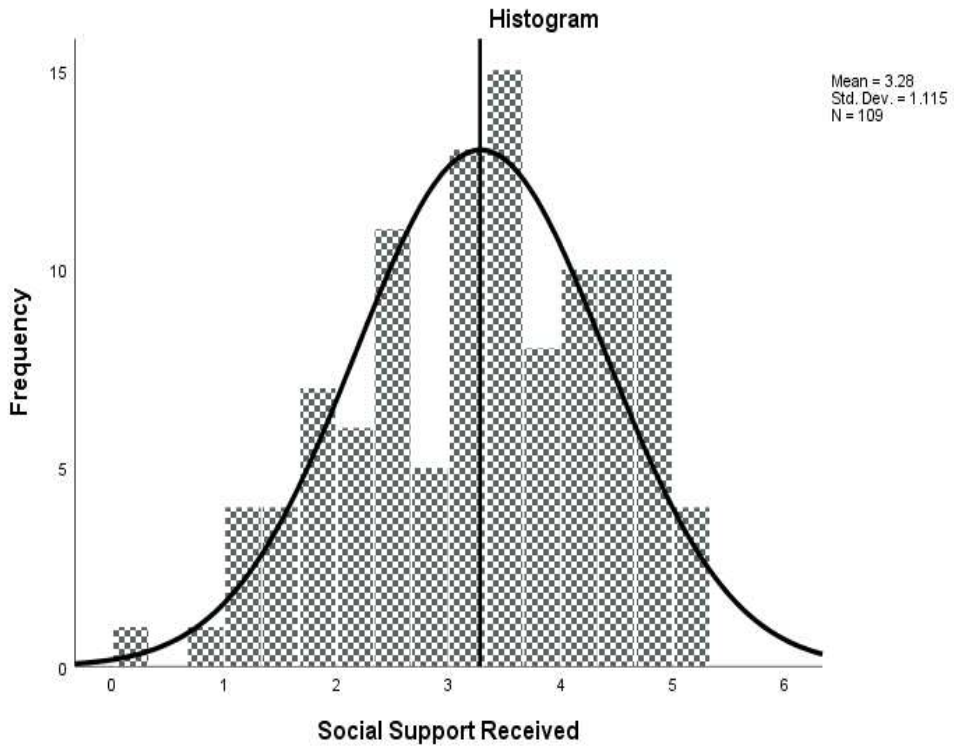
Social support was measured using a 2-Way social support instrument. The 20-item support scale measured (a) emotional support with seven items, (b) giving support with five items, (c) instrumental support with four items, and (d) physical support with four items (Shakespeare-Finch et al., 2011). Each question on each scale had six options from 0 to 5, with 0 indicating no support received at all and 5 representing always receiving support. All participants responded on this instrument (N = 109). The results show that participants received above average support (M = 3.28, SD = 1.12). The standard deviation indicated that approximately 2 of 3 participants received support between 2.16 and 4.40 or 36% to 73% of support.

The results also indicate a small difference in the overall population mean for support and this sample mean for the support variable (SE = .11). Approximately 5.5% or less of the sample reported receiving zero social support (n = 5), level of social support (n = 20). Approximately 27% of respondents reported receiving 50% of social support (n = 29), while 48% of the sample (n = 55) reported receiving 67% or higher levels of social support. Level three support was modal with a median level of 3.40, which indicated that approximately 50% of all respondents received 57% or greater levels of social support. The lowest level reported was zero and the highest level reported was five.

Figure 5 shows a relatively normal distribution of the scores with a skewness of -.36. The skewness indicated that most responses were centered toward the middle of the distribution and not at one end or the other. The highest frequency of scores showed to the right of the mean line at the peak of the bell curve, while most scores were within the bell curve, demonstrating normality in the distribution. The results also showed a Kurtosis score of –.63, which indicates a thin tail. This low level of clustering in the tails of the distribution further indicates normality of the support responses. A summary of results for this variable are in Table 1.

Figure 5

Histogram of the Distribution of Social Support Received



Resilience to Life's Challenges Variable

Resilience in life challenges was measured using the Connor-Davidson Resilience Scale 10 with seven items on a range of 1–7, with responses ranging from total disagreement to total agreement with survey statements. All participants (N = 109) completed this survey. Results show that for participants overall resilience was moderate (M = 4.72, SD = 1.64) and that results of this sample closely represent the population (SE = .16). The median value indicates that 50% of the sample have a high level of resilience (72%). A score of 86% was modal, which was demonstrated by a six. Some participants reported the lowest level of resilience, which was 15%, while others represent the highest level, 100%. This minimum and maximum score from 1–7 shows a range of 6. This range demonstrates that all scores on the resilience scale are dispersed throughout the entire population.

These results also show that 3.7% of the sample experience the lowest level of resilience (n = 4), while approximately 19.2% of the sample report between 43% to 58% levels of resilience (n = 21). Approximately 39% (n = 42) of participants report resilience levels between 72% to 86%, which is remarkably high, and 18% (n = 20) reported the highest level of resilience. The distribution of score for this scale appears in Figure 6.

The solid line of the graph indicated the mean value and the standard deviation indicated that approximately 66% of the scores were clustered above and below the mean value and reported between 3.88 and 6.36 or 44% to 91%. The skewness of –.37 indicated that most of the scores were within the bell curve and disbursed normally within the distribution. Importantly, people with higher levels of resilience were

demonstrated to the right side of the mean line, but still no clustering occurred. The values of Kurtosis of -.94 also demonstrated that there was no clustering of small scores in the tails of the bell curve, again demonstrating normality in the distribution. A summary of scores for this variable are in Table 1.

Figure 6

Histogram of the Distribution for Resilience to Life's Challenges

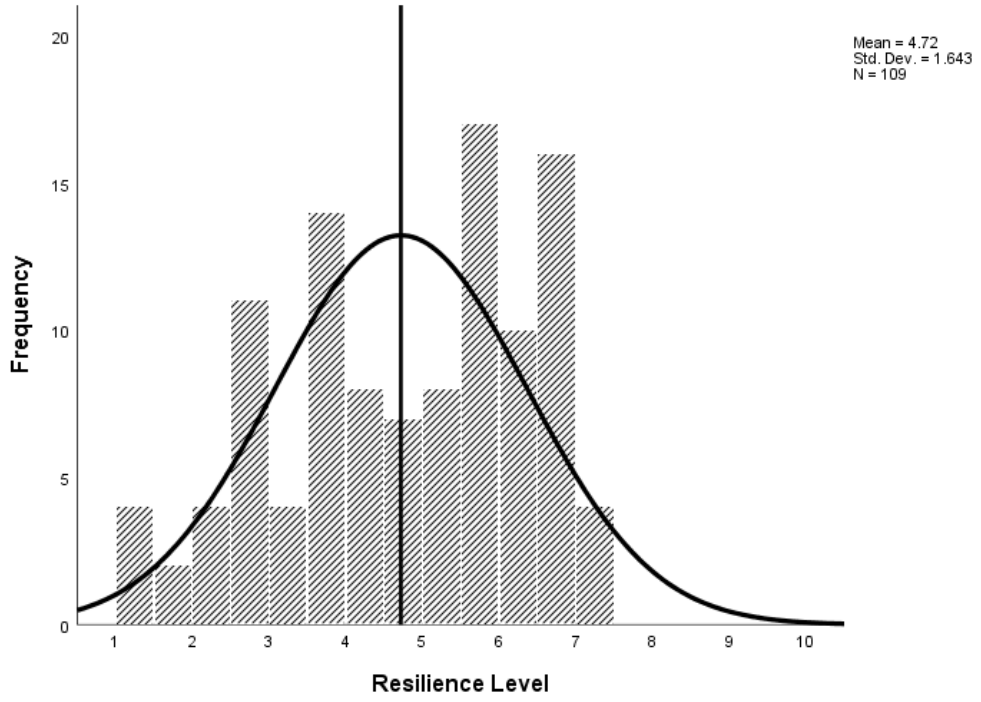


Table 1

Summary of Descriptive Analysis Variables

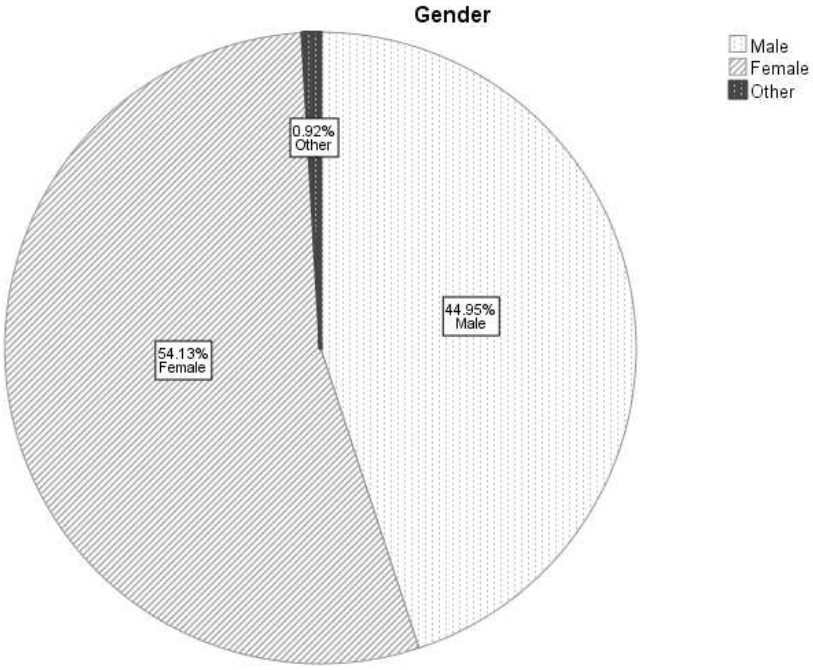
Variable	M	Median	Mode	SD	Min	Max	SE	Skew	Kurt
Trauma	1.6	1.5	0	1.17	0	5	.11	.56	–.35
Social support	3.28	3.40	3	1.12	0	5	.11	–.36	–.63
Resilience	4.72	5	6	1.64	1	7	.16	–.37	–.94
Age	46.44	49	49	12.36	19	78	1.12	–.28	–.48

Gender Variable Results

The study involved participants (N = 109) in three categories of gender. Men (n = 49) made up 45% of the sample, women (n = 59) made up 54% of the sample and 1% indicated other as their gender category. The graph found in Figure 7 shows a pie chart with each category and its relative percentages. The graph clearly shows that women made up a larger proportion of participants, suggesting that in the population, more women were diagnosed with mental health disease compared to men. However, differences may not be significant.

Figure 7

Proportion of Participants Based on Gender

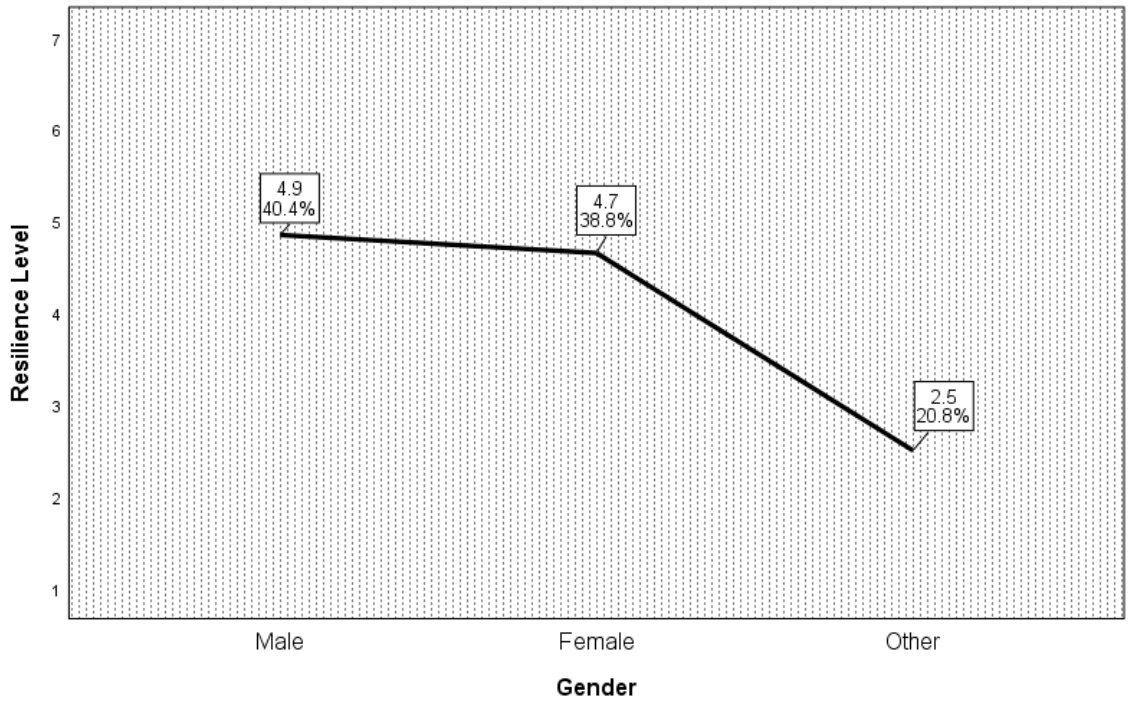


Gender Variable and Resilience

An optical comparison was done between the gender variable and resilience. The line graph found in Figure 8 suggest that although women were proportionately represented more than men, their level of resilience was not higher (68%). Men did exhibit slightly higher levels of resilience (70%), but these results may not be significantly different from each other since no significance test was performed on this comparison. The results also showed that for the person who categorized themselves as other than male or female, their resilience level was extremely low. The line graph found in Figure 8 shows the average scores for men and female, and the actual score for the category labeled as other than male or female. Comparative to Ohio population of male 48.3% and 49.5% female, and to the U.S. population of male 48.1% and female 52.4% by the Ohio 2018 Mental Health National Outcome Measures (NOMS): SAMHSA Uniform Reporting System by the U.S. Department of Health & Human Services (2019).

Figure 8

Resilience in the Study Based on Gender Grouping

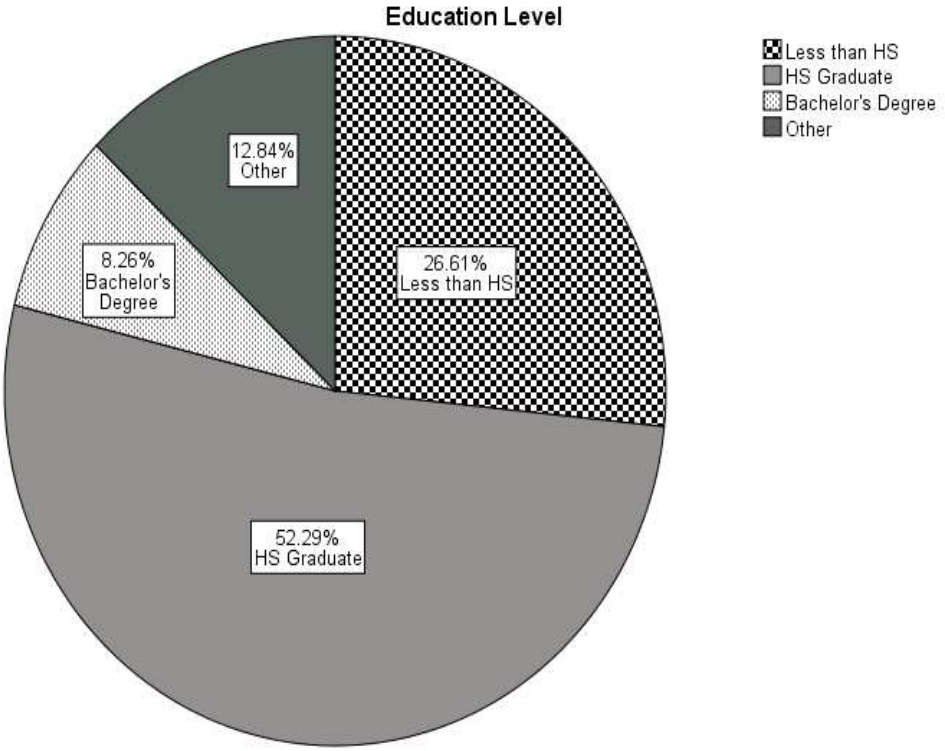


Education Level

All participants reported their education level (N = 109). There were five categories of education captured on the survey, however, participants only reported on four of those five categories. Over half of all participants reported only having a high school diploma (n = 57), which made up 52% of the sample. Close to 1 in 4 participants did not complete high school (n = 29), which made up approximately 27% of the sample. A small proportion reported earning a bachelor's degree, which made up 8% of the sample and the rest reported some other education level. The pie chart found in Figure 9 shows the proportion reported for each category of education found in this sample.

Figure 9

Proportion of Participants Earning Education



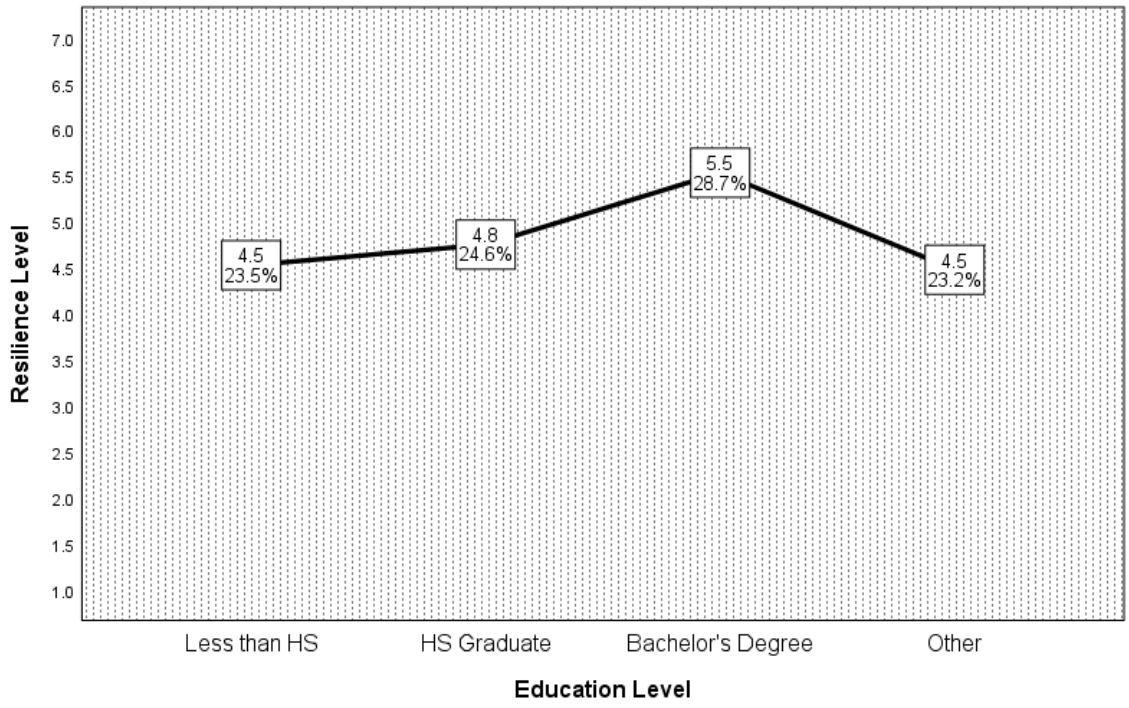
Education Level Variable and Resilience

A graphical analysis was completed to optically examine differences in resilience based on education level. Results were not tested for significant differences using inferential analysis. These results show that for those who earned a bachelor's degree, their level of resilience was approximately 79% and those who did not earn a high school diploma had moderately lower levels of resilience (65%). For those who earned a high school diploma, their level of resilience was lower than those who earned a bachelor's degree but higher than those who reported less than a high school diploma (65%). These descriptive results suggest that those who were able to complete a bachelor's degree also

developed more resilience, but for those who do not complete a high school diploma, there was a slightly lower level in their ability to build or maintain resilience against life's challenges. The graph found in Figure 10 demonstrate these results.

Figure 10

Line Graph of the Associations of Education on Resilience

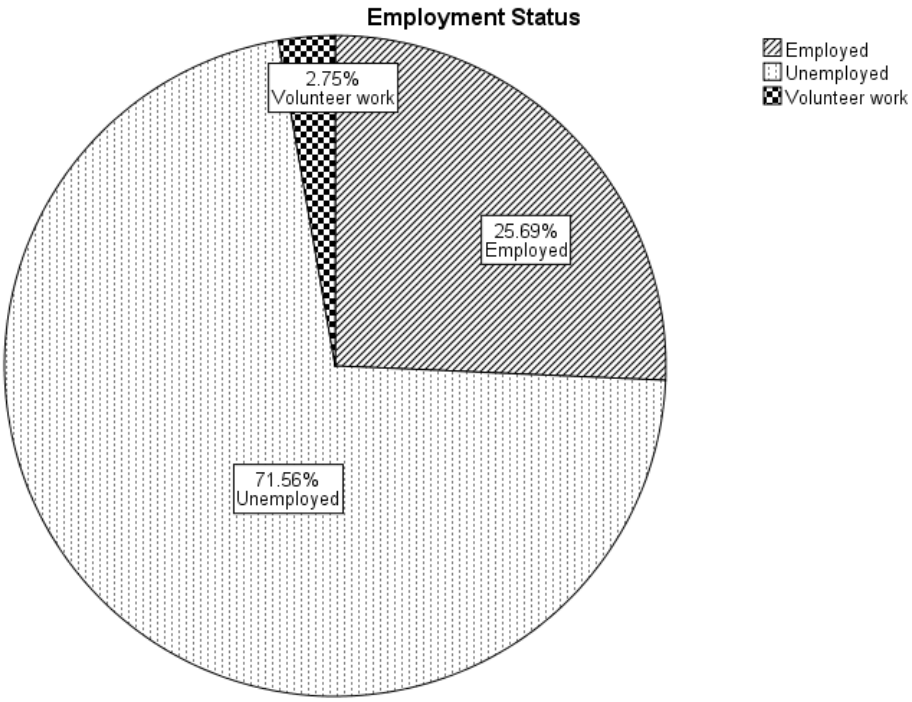


Employment Status

All participants reported their employment status on the survey (N = 109). Many participants indicated that their employment status was unemployed (n = 78), which made up 72% of the sample. Approximately 1 in 4 participants reported being employed (n = 28), which was 26% of the sample and a small proportion of the sample reported working in a volunteer position. The pie chart in Figure 11 shows the proportion of employment for each of the three levels of employment.

Figure 11

Pie Chart of the Proportion of Employment for Participants

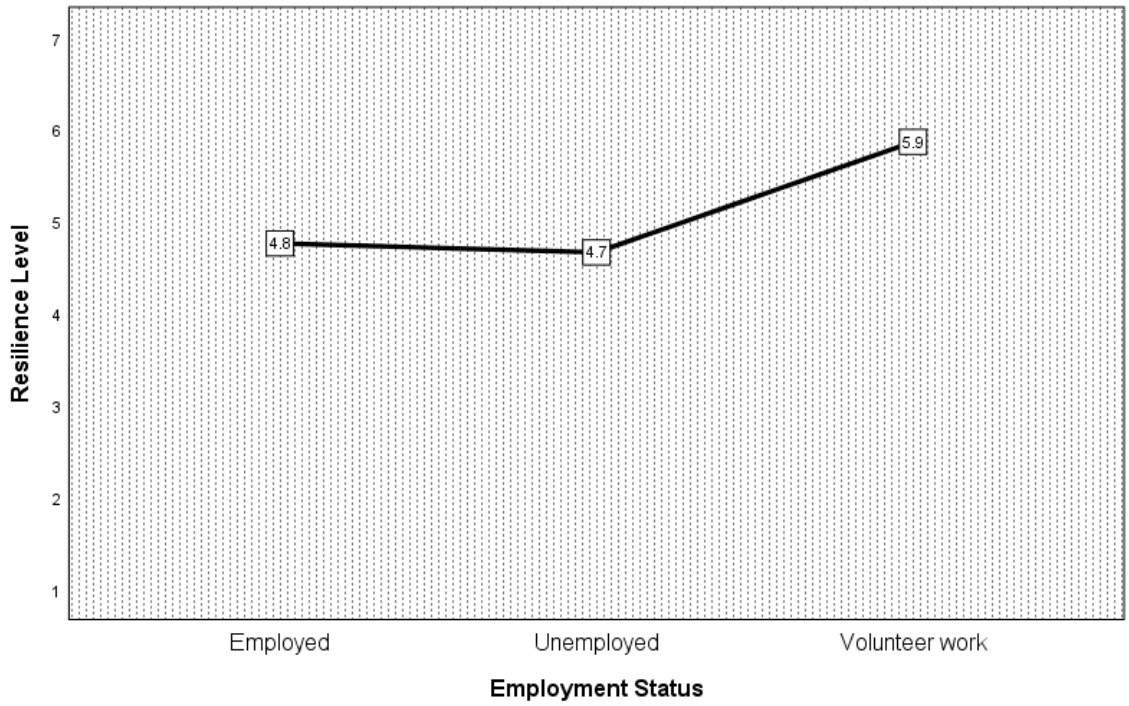


Employment Variable and Resilience

A graphical analysis was completed on the resilience level of participants based on their employment status. The graph shows that those who did volunteer work experienced a higher level of resilience (85%) compared to those who were employed and unemployed. Both employed and unemployed groups experienced relatively high levels of resilience, which was close to 70%. Differences in resilience levels between all groups may not be significant since inferential analysis was not conducted but does suggest increased resilience to life's challenges when employed in some way, especially when compared to people who were unemployed. The line graph in Figure 12 shows participant level of resilience based on their level of employment.

Figure 12

Line Graph of Differences in Resilience Based on Employment



Assumptions

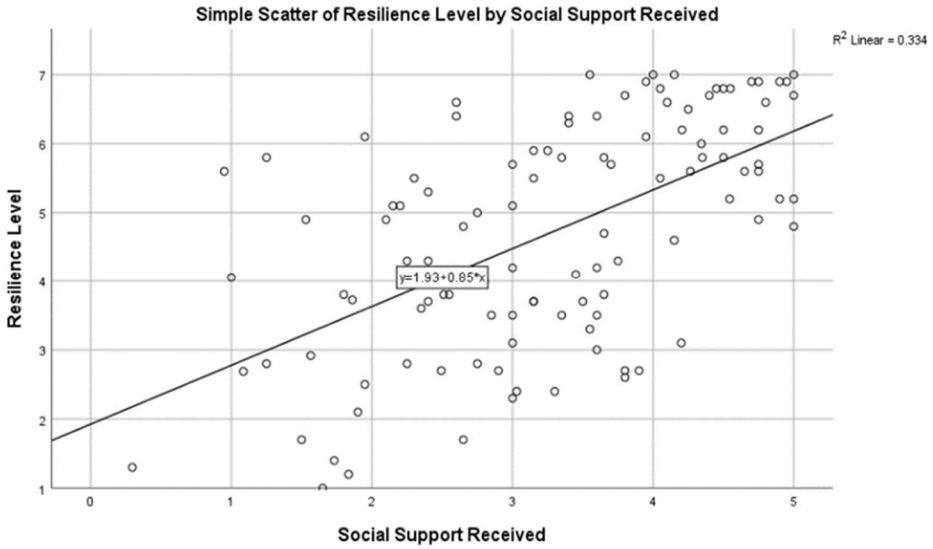
Conducting this analysis required that data meet certain statistical assumptions for a regression analysis. These assumptions included that variables in this dataset were continuous and that the criterion variable was a continuously measured variable. Categorical variables were transformed into dummy variables to meet continuous variable requirements. Assumptions were also that the variance between scores was non-zero and that no multicollinearity relationships existed. Assumptions were also that predictor variables had a linear relationship with the dependent variable, that each variable measured was independent of each other, and that any significant relationship found showed linearity with the dependent variable.

A scatterplot generated in Figure 13 of this empirical study shows an image of observed linear relationship between the independent variable and the dependent variable, which were resilience and social support. Sher et al. (2017) argued that the scatterplot was popular among social scientist when studying behaviors and attitudes of a phenomenon. The dots on the graph shows that as social support increased, many people showed increased resilience. The graph depicts these experiences among participants.

There were few cases where people received moderate to high levels of social support but still experienced lower levels of resilience. Given this population of people with mental illness, this outcome was not an abnormality. The graph also shows that many people also benefitted from receiving social support. The regression line produced in the plot solidified that a relationship existed between these variables. These findings also showed that even without receiving social support, many participants demonstrated higher levels of resilience. The trend however was that people who received social support also showed higher levels of resilience and there were no outliers observed (Sher et al., 2017).

Figure 13

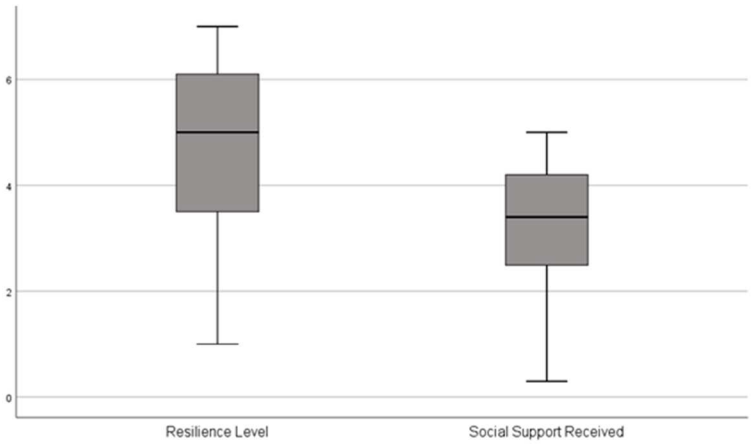
Scatterplot of Social Support on Resilience



In Figure 14, a box plot graph was also generated for confirming that no outliers existed in this univariate data. According to Zhao and Yang (2019), using a boxplot was common among social scientist for observing abnormal values in a study. There were no abnormal data values indicated or observed. These visualizations demonstrated reasonability in using this dataset for interpreting the results of the study.

Figure 14

Boxplot Supporting That No Outliers Exist



A multiple regression analysis was conducted to determine if independent variables estimated an outcome on the dependent variable (Gençoglu et al., 2018). The descriptive summary found in Table 2 shows the mean and standard deviation of each variable entered into the regression model.

Table 2

Descriptive Summary From Regression Analysis

	M	SD
Resilience level	4.72	1.64
Trauma level	1.62	1.17
Social support received	3.28	1.12
Age	46.44	12.36

The results yielded summary statistics showing four models for predicting resilience among people with mental illness. The results in model one shows an estimate of how well age, social support, and the amount of trauma people experienced predicted

resilience. This model accounted for a significant contribution (33%) of the variability in resilience, R2 = .34, adj. R2 = .33, F (3, 105) = 18.33, p < .001(Gençoglu et al., 2018). All other models after controlling for age, social support received, trauma level was not significant. The research question was to what extent did childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment), predict resilience against life challenges in adults with mental illness?

This analysis was able to be used to answer the research question by paying attention to the R2 change in the model for all significant models, which only involved the first model. Because this analysis provided a good model for answering the research question, reversing the order of variables and reanalyzing data was not necessary (Cebi & Ozdemir, 2019). A summary of the model is in Table 3 and the ANOVA results in Table 4.

Table 3

Model Summary Results

Model	R	R^2	Adj. R^2	S.E.	Change statistics				
					R^2 Chg.	F Chg.	df1	df2	P
1	.59[a]	.34	.32	1.35	.34	18.33	3	105	.000
2	.61[b]	.37	.34	1.34	.02	1.84	2	103	.165
3	.61[c]	.38	.33	1.34	.01	.85	2	101	.431
4	.63[d]	.39	.33	1.34	.02	.96	3	98	.416

Note. a = predictors (constant), age, social support received, trauma level; b = predictors (constant), Age, social support received, trauma level, male, female; c = predictors, (constant), age, social support received, trauma level, male, female, volunteer, employed; d = predictors (constant), age, social support received, trauma level, male, female,

volunteer, employed, bachelor's degree, other education, high school graduate;

e = dependent variable, resilience level.

Table 4

ANOVA Results From Regression Analysis

Model	SS	Df	MS	F	P	
1	Regression	100.27	3	33.42	18.33	.000b
	Residual	191.43	105	1.82		
	Total	291.70	108			
2	Regression	106.86	5	21.37	11.91	.000c
	Residual	184.84	103	1.79		
	Total	291.70	108			
3	Regression	109.92	7	15.70	8.73	.000d
	Residual	181.78	101	1.80		
	Total	291.70	108			
4	Regression	115.10	10	11.51	6.39	.000e
	Residual	176.61	98	1.80		
	Total	291.70	108			

Note. a = dependent variable, resilience level; b = predictors (constant), age, social support received, trauma level; c = predictors (constant), age, social support received, trauma level, male, female; d = predictors (constant), age, social support received, trauma level, male, female, volunteer, employed; e = predictors (constant), age, social support received, trauma level, male, female, volunteer, employed, bachelor's degree, other education, high school graduate.

In this regression analysis model shows there was a predictor contributing to resilience. The hypothesis was that childhood trauma experience, social support, and demographics (age, gender, education level, and employment) could not predict resilience against life challenges in adults with mental illness, and all beta values were equal to zero ($\beta = 0$). This null hypothesis was rejected because a significant model shows three predictors, which included trauma level, social support received, and age

predicted 32% of the variance in resilience. A closer examination of each predictor in the significant model shows that social support received was the only significant predictor in the model ($p < .001$).

The relationship was positive, indicating that as social support increased, resilience also increased. Although not significant, age and trauma contributed slightly to the model. These results are attempting to show that as people's age increased, their level of resilience increased and as trauma level decreased, their level of resilience increased. The 95% CI ranged from .63 to 1.10, indicating that in the population it is unlikely to find a zero relationship between social support and resilience (Iyanda et al., 2018). Since b-values indicate the degree each predictor affects outcome in this model, holding all other predictors constant, non-significant b-values are not entered into the equation for predicting resilience.

The model used to estimate resilience for this analysis is: $Y = b0 + b1(\text{social support})$, which is resilience = 1.77 + .86(social support). The standard error (S.E.) for social support indicates that approximately 11% difference across different samples from the same population (Yıldız et al., 2020). Where tTest values were not significant, these predictors did not make a significant contribution to the model and was therefore eliminated from the equation predicting resilience (Iyanda et al., 2018).

Assessing the standardized beta values indicated that trauma level and age contributed less than 1% to the model while social support contributed 59% to the model. The partial correlation of social support indicated the individual relationship with resilience when holding age and trauma level constant (Celik & Yıldırım, 2019). An

assessment of collinearity was done to determine if there were high levels of correlation between predictor variables in the model (Cheng et al., 2019). The variance inflation factor (VIF) was assessed to determine if multicollinearity existed in the model predicting resilience.

The standard that raises concerns are values greater than 10 (Cheng et al., 2019). As shown in this model, there were no values in the significant model that was greater than 10. Assessment of the tolerance needed to be below .02 to indicate a cause for concern. There were no tolerance levels that were below .02 and therefore concerns for collinearity does not arise. A summary of the coefficients are in Table 5.

Table 5

Summary of Regression Analysis Coefficients

		Unstandardized		Standardized			*95% CI for B*				
Model		*B*	*S.E.*	β	*t*	*P*	*LB*	*UB*	Partial	Tolerance	VIF
1	(Constant)	1.77	.65		2.72	.01	.48	3.06			
	Trauma level	-.12	.11	-.09	-1.07	.29	-.34	.10	-.10	.98	1.02
	Social support Received	.87	.12	.59	7.39	.00	.63	1.10	.58	.98	1.02
	Age	.01	.01	.05	.62	.54	-.01	.03	.06	1.00	1.00
2	(Constant)	.72	1.51		.48	.63	-2.26	3.71			
	Trauma level	-.09	.11	-.07	-.82	.41	-.32	.13	-.08	.96	1.04
	Social support Received	.89	.12	.60	7.46	.00	.65	1.12	.59	.95	1.05
	Age	.01	.01	.04	.51	.61	-.02	.03	.05	.98	1.02
	Male	1.25	1.37	.38	.91	.36	-1.47	3.98	.09	.04	28.30
	Female	.79	1.37	.24	.57	.57	-1.94	3.51	.06	.04	28.47
3	(Constant)	.83	1.51		.55	.58	-2.17	3.83			
	Trauma level	-.11	.12	-.08	-.99	.33	-.35	.12	-.10	.91	1.10
	Social support received	.90	.12	.61	7.44	.00	.66	1.14	.59	.92	1.09
	Age	.00	.01	.03	.39	.70	-.02	.03	.04	.98	1.03
	Male	1.22	1.37	.37	.89	.38	-1.51	3.94	.09	.04	28.33
	Female	.82	1.38	.25	.60	.55	-1.91	3.55	.06	.04	28.49
	Employed	-.28	.31	-.07	-.90	.37	-.89	.34	-.09	.90	1.11
	Volunteer	.69	.81	.07	.86	.39	-.91	2.29	.08	.95	1.05
4	(Constant)	.39	1.54		.25	.80	-2.66	3.44			
	Trauma level	-.08	.12	-.06	-.68	.50	-.31	.15	-.07	.88	1.14
	Social support Received	.89	.12	.60	7.23	.00	.65	1.13	.59	.88	1.13
	Age	.01	.01	.08	.92	.36	-.01	.03	.09	.84	1.19
	Male	.95	1.39	.29	.68	.50	-1.81	3.72	.07	.03	29.00
	Female	.61	1.39	.19	.44	.66	-2.15	3.37	.04	.03	29.06
	Employed	-.26	.31	-.07	-.85	.40	-.88	.35	-.09	.89	1.12
	Volunteer	.81	.81	.08	1.00	.32	-.80	2.43	.10	.93	1.07
	HS graduate	.46	.33	.14	1.39	.17	-.20	1.11	.14	.61	1.64
	Bachelor's degree	.79	.54	.13	1.47	.14	-.28	1.86	.15	.75	1.33
	Other education	.22	.45	.05	.50	.62	-.66	1.11	.05	.74	1.35

Assessing the Assumptions

An assessment was done to test the goodness of fit when using the linear regression model to ensure there was little departure from normality. According to

Marange and Yongsong-Qin (2019), checking violations of this assumption was by examining distributional residuals in this linear model. The histogram found in Figure 15 shows that the distribution of residuals was normal as most of the data is within the normal distribution bell curve. Marange and Yongsong-Qin argued that normality of these residuals in the linear regression model support reliable and valid results.

Marange and Yongsong-Qin (2019) also argued that the P-P plot (see Figure 16) also shows normality. The straight line on the graph demonstrated normality in the dataset because all data points showed up along the line. This analysis shows that these assumptions were not violated indicated that the model appears to be trustworthy for the sample and results are therefore generalizable to the population of people with mental health diagnoses.

Figure 15

Histogram of Normally Distributed Residuals

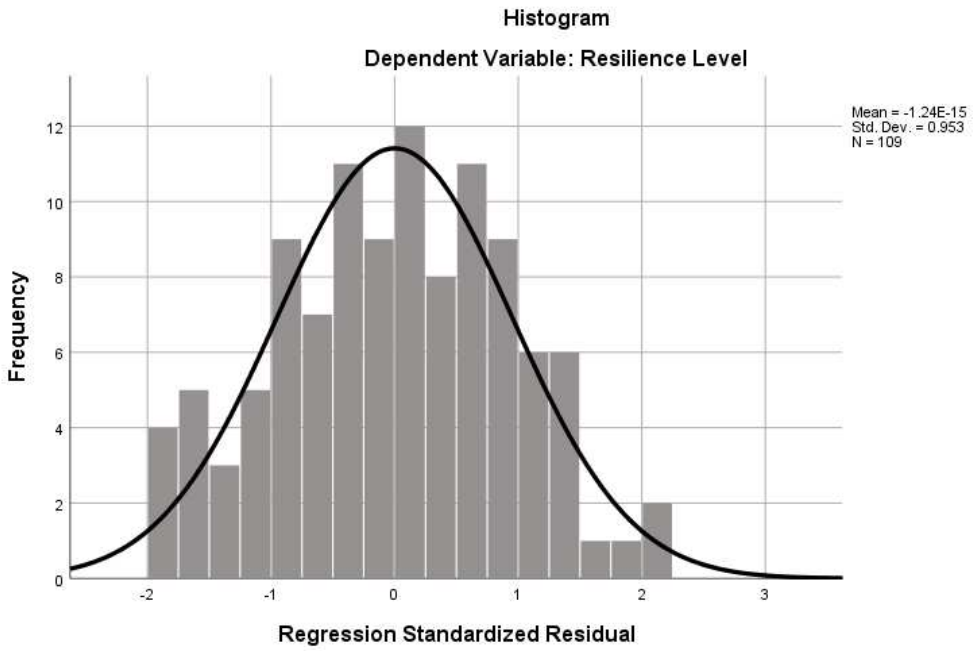
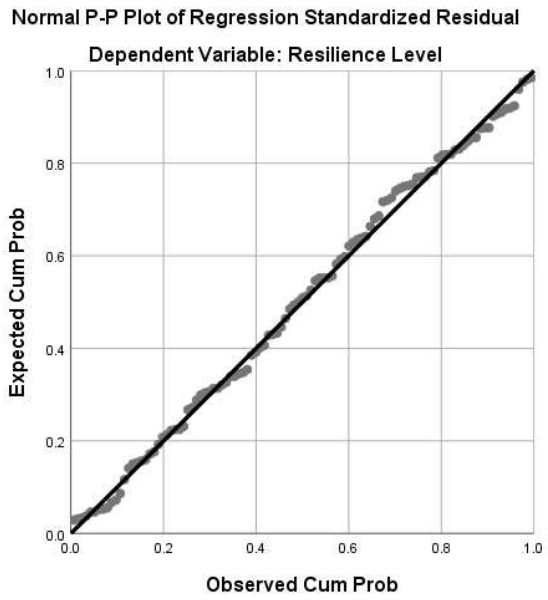


Figure 16

Showing Normal P-P Plot of Normally Distributed Residuals



Summary of Analyses

A multiple regression analysis using the enter method with four blocks was conducted to determine if predictor variables in the present study when entered into a model was able to predict resilience. The sample included individuals who were diagnosed with at least one mental illness disease from an outpatient clinic in the Midwestern region of the US. The sample included 109 participants who were all adults. The youngest participants were 19 years and the oldest was 78 years old. Women were represented in a greater number in the sample than other genders and most of the participants reported earning a high school diploma. A small number were able to complete a bachelor's degree and no one reported any higher education than a bachelor's degree.

The analysis of the research question and hypothesis accounted for several assumptions about the data such as having a linear relationship with the dependent variable. A scatterplot was produced, which showed that one variable had a linear relationship with resilience. An analysis of the assumptions was also conducted to ensure no violations in the quality of the model, which was also successful.

The final model using the multiple regression enter method analysis showed that the model was successful for determining 32% of the variance in resilience was accounted for by social support. The social support variable as the only statistically significant predictor of resilience. As such, the null hypothesis was rejected, and the alternative hypothesis was accepted. The alternative hypothesis was that at least some variables such as childhood trauma experience levels, levels of social support, age, gender, education level, and employment predicted resilience against life challenges and not all beta values were equal to zero ($\beta \neq 0$). In fact, standardized coefficient analyses indicated that by itself, social support contributed strongly to resilience (beta = .59).

The results were supported by t-test analysis and when compared to the population, there was a 95% confidence that the same results occurred within the confidence interval. A summary of the hypothesis results is displayed in Table 6. When answering the research question, neither the level of childhood trauma, a person's age, education level or employment status, or gender had any significant relationship with resilience in people who were diagnosed with at least one mental illness disease.

Table 6

Summary of Results for the Research Hypothesis

Research Question	Hypothesis	Results
To what extent do childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) (control variables), predict resilience against life challenges in adults with mental illness?	*H*0: Childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) does not predict resilience against life challenges in adults with mental illness, and all beta values were equal to zero (β = 0).	Rejected
	Ha: At least one variable such as childhood trauma experience levels, levels of social support, age, gender, education level, or employment status does predict resilience against life challenges in adults with mental illness, and not all beta values were equal to zero (β ≠ 0).	Accepted

Chapter 5 is a summary with discussions on the study including a restatement of the purpose of the study with findings. Considerations will be given to limitations of the study, recommendations for future research, and implications for social change. Finally, Chapter 5 will conclude with closing thoughts on the role of social support on increasing resilience for people on the role of social support on increasing resilience for people with mental illness and experienced childhood trauma.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative correlational study was to test any relationship found between social support, levels of childhood trauma experienced, demographic variables, and resilience against life challenges for people with mental illness. Social support has been determined to be a factor in the development of resilience; however, this factor has not been evaluated in the mental health population. In this research, I evaluated social support to determine resilience among the mental health population and if age, gender, education, or employment increase resilience.

The independent variables were levels of childhood trauma by adverse childhood trauma experiences and social support received. The dependent variable was resilience, such as people's ability to cope with current life challenges. Covariants or demographic variables (age, gender, education, and employment status) were used as covariates in the current study.

The nature of the current study was quantitative, and I used a correlational design for testing the predictive relationship between variables. The benefit of using a correlational design was to determine the predictor association of variables on the dependent variable (Nelson et al., 2016). Data were collected using convenience sampling from adults receiving treatment for mental illness at a metropolitan outpatient mental health clinic in the midwestern United States. Participants included in the study were assumed to have experienced different levels of childhood trauma. Data were

collected using a paper survey administered at the research site, and collected data were analyzed using the SPSS application.

The rationale for completing this study was to evaluate one overall research question to examine the extent childhood trauma experience levels, levels of social support, and demographics (age, gender, education level, and employment) predict resilience against life challenges in adults with mental illness

Interpretation of the Findings

Key findings from this study include that, although not significant, age and trauma contributed slightly to the model results. These results show that, as age increases, level of resilience increases, and as trauma level decreases, level of resilience increases. Overall, the participants in this research reported high levels of social support that resulted in greater resilience. These results suggest that resilience against life challenges among adult individuals with mental illness may be predicted by the degree of social support the individual receives.

These results are comparable to Barnes' social support theory (1954), which is used to define that social support can be increased when people have emotional support provided by a group of people or peers. Emotional support (psychosocial support) is the care and comfort people experience from a group, which results in increased self-esteem and feelings of appreciation, which are determined by the group's feelings of resilience. Barnes argued that receiving social support usually confirms to people with mental illness that others care for them and that there is always a source of comfort available to them. The results of Barnes' social support theory were established by the group's overall

expression of resilience results. This finding is aligned with and confirms previous peer-reviewed empirical study results (Bilgin et al., 2018; Cao et al., 2020; Tas, 2019). The social support variable was the only variable in the statistical model showing any significant relationship with resilience in the study. Having no experience or severity of childhood trauma and demographic variables did not predict resilience.

This research finding was in contrast with or disconfirmed results provided by Kocalevent (2015), who reported people with mental illness often lack social connectedness, which decreases their resilience. However, Kocalevent's assertion that social support and resilience are connected was confirmed by this research. Greater social support yields greater resilience while decreased social support yields decreased resilience in mental health clients. This same concept was also confirmed by Windle (2011).

Studying the relationship between childhood trauma and resilience for people with mental illness alone is important. Results in the present study align with existing literature that other intervening variables are responsible for creating a connection between levels of childhood trauma experienced and an individual's ability to build resilience against life challenges. These findings suggest, but cannot completely confirm, that being diagnosed with mental illness alone is not enough to influence resilience and that symptoms of PTSD or experiences of hopelessness are likely triggers that affect resilience in a negative way. Research from this study extends knowledge. The findings on the relationship between social support and resilience for people with mental illness is paramount. Receiving social support is monumental for living a better life and even

controlling mental illness itself. Receiving adequate levels of social support is beneficial for increasing the well-being of people with mental illness.

When conducting the present study, analyzing any association between educational attainment for people with mental illness was important. The findings show that some people diagnosed with mental illness are able to achieve basic education and, to a lesser extent, receive higher levels of education. What remained unclear was understanding the type of mental illness that affects educational attainment. Understanding if educational attainment has any association with resilience for people who experience ACE and mental illness would help to understand whether people can control their resilience by building brain power using educational skills. Researchers in previous empirical studies found no relationship between level of education for people experiencing ACE and diagnosed with mental illness and their ability to build or maintain resilience. Those results were similar to the findings in the present study. Other researchers found that resilience was boosted by education for people who did not have mental illness but who experienced childhood adversities. These findings solidify the presence of mental illness itself with or without experiencing ACE.

Several variables in the study had no relationship with resilience. Having ACE, a diagnosis of mental illness, a person's employment status, and being female had no relationship with increasing or decreasing resilience for people diagnosed with mental illness. No researcher has been able to demonstrate these results in previous studies. As such, even though these results were not significant, they provide the discipline with additional information on what may not influence resilience in people diagnosed with

mental illness. Finally, the results of the present study offer concluding evidence that providing social support is substantial for increasing resilience. People who receive social support are better able to cope with life's challenges. In populations of people who do not have mental illness, people who perceived receiving social support were able to increase resilience, although the social support received was from people of significance (Day & Amponsah, 2020). The same was true in studies where children experienced trauma but did not have mental illness (Amin et al., 2020). People with mental illness often benefit when perceiving social support from others.

These studies suggest that, without social support, people often feel a sense of vulnerability and distress, and many often experience anxiety, which often leads to poor decision making. Providing social support, such as companionship and emotional support, to people with mental illness is vital for building social capital in these individuals. *Social capital* refers to an existence of social connections and relationships that people rely on for social and psychological maintenance (Kuang-Yuan et al., 2019). Cullen's (1994) social support theory combining Barnes' (1954) and Durkheim's (1954) theories of belongingness and social solidarity was appropriate for this study. These theories were used to determine if childhood trauma experience levels and the levels of social support mitigated the development of resilience against life challenges. The level of social support directly impacts the adult's resilience level.

Limitations of the Study

Data collection using a convenience sample method was a limitation for this research related to participants not being available to complete the study due to

exacerbations of mental illness. This research occurred over a 7-week period and participants chose to join the study at any time during the 7 weeks. Nonetheless, the total participants necessary were obtained without difficulty. Results can be generalized to the population in the Midwest metropolitan area, but future researchers may use these results to compare to specific mental health populations across the United States and in other countries.

An additional limitation was that participants may not have been able to complete the questionnaires, which did occur. Due to less than 50% completion by multiple participants, these questionnaires were not used for analysis of the research results. Even omitting the incomplete participants, an adequate number of questionnaires was completed.

No selection, social desirability, researcher, or sampling bias occurred due to all participants having equal opportunity to participate in this research. I purposefully chose the mental health population and due to my affiliation with the agency. A flyer was posted for any client choosing to join the research who was not present on the research days to contact me to join the research. No clients were preselected to join this research and all clients who attended this clinic were welcomed to participate in this research. While I am employed by this same agency where the research took place, none of my clients were allowed to participate in the study. All participating clients were unknown to me. Clients approached me to voluntarily participate in the research and all questionnaires completed 50% or greater were used in data analysis. Social desirability by participants cannot be excluded from this research but is a factor that is unable to

determine. Participants were able to sit privately, ask any question for clarification, and all questionnaires were confidential. All questionnaires completed at 50% or greater were used in this research, which clarified no researcher bias.

The ACE questionnaire was a limitation of the present study. The severity and frequency of occurrences of childhood trauma was not determined in the present study and could not determine if resilience was affected among people who experienced childhood trauma. Another limitation was collecting data during the Covid-19 pandemic at a data collection site. Participants demonstrated some level of stress because of having to wear a face mask and maintain separation from others; as such, participants may not have concentrated well on reading and responding to the questions on the survey. Another limitation of the study was participants who may have forgotten some of the childhood trauma experienced. Ciaramella (2018) argued that stressful events such as childhood trauma affect or impair memory among people with mental illness or psychiatric disorders. For this reason, many participants may not recall or remember the type of traumas experienced as a child.

Recommendations for Further Research

Conducting the present study required focusing on childhood trauma, social support, and resilience for people diagnosed with mental illness, controlling for age, gender, employment, and education. Future researchers can enlarge the focus of childhood trauma by evaluating topics such as experiencing acute trauma, repetitive trauma, and chronic trauma as a child on resilience to cope with life challenges as adults for people with mental illness. Future researchers can also evaluate additional theories

such as self-acceptance theory—not for determining physical acceptance but for focusing on having a positive self-image for increasing self-efficacy leading to increased resilience for people with mental illness. Future researchers may choose to conduct a qualitative study on this phenomenon to determine the lived experiences of participants to evaluate additional resilience factors. Additionally, age, gender, education, and employment demographic variables may be used or expanded to seek new outcomes from people in the mental health community or outside the mental health population.

Researchers can also investigate resilience in participants who live in other parts of the United who that may be influenced by social settings other than in the midwestern United States. Conducting the present study during the Covid-19 pandemic may have altered participants' perceptions on relationships between childhood trauma and resilience, which was likely to yield different research outcomes. The suggestion for future studies is to repeat this study after the pandemic is over to determine if the pandemic itself had an association on the outcome of the study.

Implications

At the time of this research, there were no available studies on the relationship between social support for adults diagnosed with mental illness and applied childhood trauma outcomes. The present study makes a strong contribution in the psychology field to understanding how social support is an integral part to the development of resilience in adults. No previous studies have been completed on this connection and this research will add to the extant empirical research.

Implications for Families

The results of the study support how important creating social supports systems are for individuals who experienced childhood trauma and are diagnosed with mental illness and for those who did not experience childhood trauma but have mental illness. Additionally, these results are imperative to be shared with families to promote continued social support and providing a network of support to assist people who have been exposed to childhood trauma and as well as people who have been diagnosed with mental illness.

Implications for Professionals

Professionals are able to mitigate the associations of mental illness by encouraging people to increase their social support systems. People who have developed social support systems increase their resilience when difficult situations develop. Social support agencies can help to reduce a culture of negativity related to mental illness by increasing education resources and reducing the negative stigmatism related mental illness.

Managers of organizations are able to use the results of this study to help identify how they may be lacking in providing a culture of social support to employees or members who experience mental illness challenges. Managers of organizations must incorporate mental health considerations in decisions when improving organizational culture and expand initiatives that create a more emotional and supportive environment for people with mental health struggles. The dissemination of the results of this study is practical at locations where mental health professionals receive educations and

continuing education units as well as in conferences that include discussions and awareness of mental health issues. The results of this study are highly suitable for entry into chain journals such as medical, psychiatric, pediatric, trauma, nursing, and social work publications.

Implications for the Psychology Discipline

In the psychology discipline, researchers, psychologist, and other mental health providers have a profound responsibility to promote positive and healthy life behaviors among people diagnosed with mental illness through social support strategies (Bogomolova et al., 2016). Social support must include promoting changes in harmful lifestyle behaviors such as creating strategies for medication compliance like taking prescribed medications on time. Social support must include promoting other health behaviors such as promoting consumptions of healthy foods like low processed foods and foods in its original forms (Bogomolova et al., 2016).

While the social support theory has been used in previous studies, the connection of how levels of social support impact the outcome of resilience in the mental health population has not previously been established. Social support theory and resilience studies can be expanded to additional populations and geographic areas to determine implications to additional people.

Health Implications for Individuals

Increasing activity helped when improving sleep and restfulness, thus reducing sleeping difficulties (Stubbs et al., 2017). Poor sleeping habits or the ability to sleep have a detrimental impact on their mental illness (Stubbs et al., 2017). Professionals can

therefore provide social support by advocating strategies for increasing restfulness and helping people with mental illness to get more sleep. One such strategy is setting up a routine of sleep and awake times to be maintained. Many people with mental illness need social support in changing lifestyle choices such as reducing and stopping nicotine use and recreational drugs and alcohol use, which is beneficial when improving sleep and restfulness (Saha, et al., 2018). Providing these types of social support among people with mental illness must be encouraged to reduce lifestyle risky behaviors to help mitigate the negative outcomes of mental illness.

Many people with mental illness also experienced associated insomnia. Social support must therefore include promoting the avoidance of foods that reduces restfulness such as caffeine and other dietary stimulants (Chaudhary et al., 2016). Professionals may further approach social support by promoting and supporting increased physical activity among people with mental illness. The importance of social support is to build optimism and self-esteem, which increases resilience against life challenges, leading to a higher quality of life for this population. Other forms of social support includes emotional social support for empowerment (McGinty et al., 2018) and tangible or physical support such as finances (Bishop, 2017).

Positive Social Change Implications

The results of this study provide positive social change by highlighting the importance of social support systems for improving the quality of life for people with mental illness. Applying the results of the present study leads to positive social change because by demonstrating that people with mental illness benefit when receiving social

support. Benefits include improved self-efficacy for leading independent lives, making better decisions, and improved likelihood of living to a normal life expectance. strongly support the important role that social support systems promoted increased resilience. Receiving social support also help people with mental illness contribute to their own mental health treatment compliance.

Social support often motivate people in this population to accept their illness without the social stigma associated with mental illness. Social support from people who are meaningful to patients can then be encouraged to take prescribed medications and follow patient care guidelines to help control the negative outcomes of mental illness. Social change occurs when new information is implemented to provide improvement to the quality of well-being in people's lives every day and assists them with increasing their resilience against life challenges.

Positive social change among researchers and practitioners occurs because these professionals now know that not all levels of childhood trauma and all levels of severity of childhood trauma have a relationship with resilience among mental health patients. Researchers are now able to investigate levels of severity for various types of childhood trauma, to determine how these factors help mental health patients. Researchers are also able to improve the quality of life for people in their later years by preparing for a decline in resilience in people with mental illness.

Providing social support in a community can contribute to increased quality of life for people with mental illness. Providing various type of social support have a real benefit in the lives of individuals, and as such communities should not stigmatize people

with mental illness but instead support this population as much as possible. People in the community are now aware that mental illness often begins at an early age, and although there were no relationships with resilience, many children were abused by adults. These abuses must stop so that adults are better able to control their mental illness without having to deal with the trauma associated with abuse as children. The results of the present study also leads to positive social change because employers in the community now understand that some people with mental illness are better able to make meaningful contributions in the workplace.

Conclusions of the Study

There are many areas in psychology discipline related to mental illness and treatment requiring scientific study. Conducting this study was therefore beneficial for closing a gap in the literature on the relationship between childhood trauma and resilience against life's challenges for people with mental illness. Treatment of mental health is not just about taking psychotropic medication and adhering to medication regimes, but that people with mental illness find real benefit in various forms of social support. Support from family, friends, and the wider society provides enormous benefits to this population, which often leads to an improved quality of life. When social support increased, resilience also increased.

The development of social support systems is directly proportionate and imperative to the development of resilience in the mental health population as well as many other populations. People who develop social support systems with other persons and groups have improved quality of life with enhanced resilience. Finally, we build

resilience when we are supported by other individuals and groups during life challenges and these same people are often the first to congratulate when we overcome these obstacles.

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Appendix A: Advertisement for Research Participants

Seeking Research Participants

Clients from the [redacted] are invited to voluntarily take part in a research study to determine if adults, who have experienced childhood trauma, build social support and resilience in adulthood.
This research has been approved by [redacted] and Walden University. This study is not related to your care at Unison or evaluating any service at Unison. All information is kept strictly confidential and no name or patient number will be on any form. My name is Carol Krieger and I only am completing the final research requirements for my doctorate degree. I am an employee of [redacted] but only work at [redacted]. I have never worked at the [redacted].

There is no money compensation for your completing this research. I will be the only person reading these forms. The chairperson of my research committee is Dr. Sandra Rasmussen and be contacted by email at sandra.rasmussen@waldenu.edu.

Approximate time to complete all forms will be 15 minutes or less

Criteria to join this research:

- Adults 18 years to 65 years of age and have been diagnosed with a mental illness.
- English speaking and able to understand and complete paperwork independently
- All genders, races, and educational levels.
- Cannot be a present or past client of this researcher
- are clients at [redacted] Street office

Thank you for your participation in this important study.
Carol L. Krieger, PhD (candidate)

Location: Research will occur only at Woodruff office on these dates and times. If you have additional questions contact: carol.krieger@waldenu.edu

All clients who desire to participate in this study should appear to the Woodruff office on the following dates and times.

Dates: July 16, 23, 30, August 6, 13, 19, 26, 2020

Time: 8 am till 5 pm

Appendix B: Consent Letter

Consent Letter

You are invited to voluntarily take part in a research study about Relationship between Social Support on Childhood Trauma when Building Resilience. The research's intention is to determine if adults, who have experienced childhood trauma, build social support and resilience in adulthood.

This study is being conducted by Carol L. Krieger, who is a researcher at Walden University and is an employee of [redacted]. This research is separate from my employee role and I will not be examining your [redacted] record. Agreeing or not agreeing to participate in this research will not affect your role as a client of [redacted]

This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

Background Information:

The purpose of this study is to research study is to determine if childhood trauma experience levels and levels of social support, and resilience against life challenges in Midwest U.S. metropolitan community mental health outpatient adults who are receiving outpatient care. All participants in this research are voluntary and researcher will not independently request that they join this research.

No compensation will be provided to participants to complete this study.

Seeking adults 18 years to 65 years of age

- Clients from [redacted] Street office
- Cannot be a present or past client of this researcher
- diagnosed with a mental illness.
- English speaking and able to understand and complete paperwork independently
- All genders, races, and educational levels.

Procedures:

The research consists of three scales and participants will write their age, check gender, education, and employment status.

If you agree to be in this study, you will be asked:

- Complete the ACE Questionnaire which asks you question related to exposure to childhood trauma.
- Complete the 2-Way Support Scale which discusses your ability to give and receive social support.
- Complete the Resilience Scale which defines your overall adjustment to childhood stress as an adult.

Voluntary Nature of the Study:
There is no money compensation for your completing this research. I will be the only person reading these forms. This study is voluntary. You are free to accept or turn down the invitation. No one at [redacted] will treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some minimal risk of the minor discomforts that can be encountered in daily life, such as remembering possible childhood trauma. No details will be asked of your childhood trauma. Being in this study would not pose risk to your safety or wellbeing. If answering questions causes minor distress, an evaluation can occur to decrease any trigger for distress, depression, or anxiety. Benefits of this research will provide information that can determine if a social support is required to develop resilience following childhood trauma.

Privacy:
All information from this research will not identify the agency at which this research was completed or the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. All forms will be identified with a number and all forms will be identified with this number to determine if all forms were completed. The researcher will not use your personal information for any purpose outside of this research project. Data will be kept secure by being locked in a secure cabinet that only the researcher has the key. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via carol.krieger@waldenu.edu.
If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210.
Walden University's approval number for this study is: 07-02-20-0144989 and it expires on July 1st, 2021.

Obtaining Informed Consent
If you feel you understand the study well enough to decide about participating in the study, please begin the study. You may keep this form for your records.

(This 2 page form will be attached to the front of the surveys and will be given directly to participants.)

Appendix C: Childhood Trauma, 2-Way Support, and Resilience Instrument

Directions: Please read each question by checking a box. Zero or 0 indicates that you have not experienced this situation. If you have experienced the trauma in the question, please tell me the level between 0 and 1, where a 0 indicates no level and a 1 indicates positive level. When providing responses, please think about what you experienced when you were a child (under age 18 yrs. old).

1. Did a parent or other adult in the household often swear at you, insult you, put you down, or humiliated you or acted in a way that made you afraid that you might be physically hurt?	0 ☐	1 ☐	2 ☐
2. Did a parent or other adult in the household often push, grab, slap, or throw something at you or ever hit you so hard that you had marks or were injured?	0 ☐	1 ☐	2 ☐
3. Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way or tried to or have oral, anal, or vaginal sex with you?	0 ☐	1 ☐	2 ☐
4. Did you often feel that no one in your family loved you or thought you were important or special or your family didn't look out for each other, feel close to each other, or support each other?	0 ☐	1 ☐	2 ☐
5. Did you often feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?	0 ☐	1 ☐	2 ☐
6. Did you ever have negative feeling about your parents being separated or divorced?	0 ☐	1 ☐	2 ☐
7. Was your mother or stepmother often pushed, grabbed, slapped, or had something thrown at her or sometimes or often kicked, bitten, hit with a fist, or hit with something hard?	0 ☐	1 ☐	2 ☐
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?	0 ☐	1 ☐	2 ☐
9. Was a household member depressed or mentally ill or did a household member attempt suicide?	0 ☐	1 ☐	2 ☐
10. Did you ever experience negative emotions because a household member went to prison?	0 ☐	1 ☐	2 ☐

Directions: Please read each statement and answer the question. Scores range from 0 to 5 where a "0" indicates no support and levels up to a "5" that indicates total support. Please check one box for each statement.

1.	There is someone I can talk to about the pressures in my life	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
2.	I am there to listen to other's problems	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
3.	If stranded somewhere there is someone I can depend on for help.	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
4.	I help others if they are too busy to get everything done and ask for my help.	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
5.	People confide in me when they have problems	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
6.	I feel that I have a circle of people who value me	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
7.	I am a person other people can turn to for help with tasks	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
8.	There is someone in my life that makes me feel worthwhile	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
9.	I give others a sense of comfort in times of need	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
10.	There is at least one person that I feel I can trust	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
11.	When someone I lived with was sick, I helped them	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
12.	There is someone in my life I can get emotional support from	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
13.	People close to me tell me their fears and worries	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
14.	I have helped someone with their responsibilities when they were unable to fulfil them.	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
15.	There is someone who would give me financial assistance	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
16.	When I am feeling down there is someone, I can lean on	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
17.	There is at least one person that I can share most things with	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
18.	I have someone to help me if I am physically unwell	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
19.	I look for ways to cheer people up when they are feeling down	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
20.	There is someone who can help me fulfil my	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

responsibilities when I am unable	

Directions: Please check the box in each question. Responses are from 1 to 7. 1 indicates I totally disagree and a 7 indicates I totally agree. Please choose one response for each question.

Example **1 = Total Disagreement** **7 = Total Agreement**

1. When I make plans, I follow through with them.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
2. I usually manage one way or the other.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
3. I can depend on myself more than anyone else.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
4. Keeping interested in things is important to me.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
5. I can be on my own it I have to.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
6. I feel proud that I have accomplished things in my life.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
7. I usually take things in stride.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
8. Not easily discouraged by failure	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
9. Think of myself as a strong person when facing challenges.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐
20. Able to handle unpleasant feelings	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐

Demographics

Please state your age _____years old

Please state the gender you most identify with

Male ☐ Female ☐ Other ☐

Please state your highest education completed

Less than HS ☐ High School ☐ Bachelor's Degree ☐ Graduate School ☐ Other ☐

Current employment status

Employed ☐ Unemployed ☐ Volunteer ☐

Thank You For taking this Survey - End

Appendix D: Approval to Use Ace Questionnaire

From: [redacted]

Sent: Wednesday, January 25, 2017 5:08 PM
To: mail@cd-risc.com

Subject: Request Form from: Carol L Krieger
From: Carol L Krieger
Department: Walden University
Address: [redacted]
City State Zip: [redacted]
Country United States
Telephone: [redacted]
E-mail: [redacted]

Purpose:

Purpose Explanation:

Project Description: I am comparing the severity of the results from the ACE

Questionnaire to 2-Way Support Scale to determine the Resilience outcome.

Sample Size: 150

Number of Times Administered: 1

Project Duration: one to two weeks till number is obtained.
Assessment Method: face to face by investigator only

Appendix E: Approval to Use 2-Way Support Scale

- Jane Shakespeare-Finch <j.shakespeare-finch@qut.edu.au>

To: [redacted]

Cc: [redacted]

Jan 26, 2017 at 6:28 PM

Dear Carol,

You are more than welcome to use the 2-Way Social Support Scale for your PhD. There is no cost, but we do like to hear about people's results.

I have attached it with scoring instructions.

Warm regards,

Jane & Jane Shakespeare-Finch, Ph.D.

Associate Professor, School of Psychology and Counselling, QUT

Director of Research

President: Australasian Society for Traumatic Stress Studies

Leader: Trauma, Resilience and Growth Research Group

&http://eprints.qut.edu.au/view/person/Shakespeare-Finch,_Jane.html

&orcid.org/0000-0003-4237-1320

Appendix F: Approval of Resilience Scale

Dear Carol:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC-10 in the project you have described under the following terms of agreement:

1. You agree (i) not to use the CD-RISC for any commercial purpose unless permission has been granted, or (ii) in research or other work performed for a third party, or (iii) provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use of the scale is restricted to the project described, and the signatory of this agreement is responsible for ensuring that all other parties adhere to the terms of this agreement.

2. You may use the CD-RISC in written form, by telephone, or **in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification. In all presentations of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should be accessed by password at a secure link, should not appear in any form where it is accessible to the public and should be removed from electronic and other sites once the project has been completed.**

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

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

5. A **student-rate** fee of $ 30 US is payable to Jonathan Davidson at 2434 Racquet Club Drive, Seabrook Island, SC 29455, USA either by PayPal (www.paypal.com, account mail@cd-risc.com), cheque, bank wire transfer (in US $$) or international money order.

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

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

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

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

Sincerely yours,

Jonathan R. T. Davidson, M.D.

Appendix G: NIH Certification of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Carol Krieger** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/03/2016.

Certification Number: 2198813.

Appendix H: Site Usage Agreement

[redacted]

May 28, 2020

RE: Letter of Cooperation

Dear Carol L. Krieger, [redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled, Relationship between Social Support on Childhood Trauma when Building Resilience within the Unison Health. As part of this study, I authorize you to collect data and disseminate results. Individuals' participation will be voluntary and at their own discretion.

Once you gain IRB approval, we understand that our organization's responsibilities include:

Allow researcher to post Participant Flyer in Woodruff lobby one week before beginning research. Dates of research will be determined upon IRB approval.
Allow researcher to be physically present in lobby to answer potential participants questions.
Provide the use of an onsite private conference/meeting room where the researcher may conduct interviews group with respondents, if room scheduled in advance.

We reserve the right to withdraw from the study at any time if our circumstances change.

I understand that the student will not be naming our organization in the doctoral project report that is published in ProQuest.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

[redacted]

Please send signed copy to: irb@mail.waldenu.edu, sandra.rasmussen@mail.waldenu.edu, and carol.krieger@mail.waldenu.edu

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. **Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document.** Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).