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Relationship Between Victims of Urban Violence and Post-Traumatic Stress Disorder

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Walden University
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MS, Colorado Technical University, 2015

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Urban violence has become common in lower-income communities that have high rates of shootings and African-American victims. Urban violence causes victims and their family and friends to experience trauma and puts them at risk for post-traumatic stress disorder (PTSD) injuries. However, there is a gap in knowledge in the framework of urban communities and their range of needs to address PTSD. The purpose of this quantitative study was to examine whether a relationship exists between reinforcement of needs, membership, influence, shared emotional connection, and post-traumatic stress symptomology (PTSS) of urban violence victims in a large metropolitan city. Albert Bandura's self-efficacy theory and social conflict theory comprised the theoretical framework for this research. A correlational design was employed with a convenience sample of 83 respondents drawn from urban violence victims using an internet-based survey instrument designed to assess the elements of sense of community. The research questions examined participants' perceptions of reinforcement of needs, membership, influence, shared emotional connection, and PTSS. Pearson's correlation coefficient and multiple linear regression analyses were performed on the collected data to test the hypotheses. The findings did not show a statistically significant relationship between participants' perceptions of sense of community and PTSD. However, victims of urban violence can use the results of this study to expand understanding of PTSD to address the realities of living in lower-income geographical locations, therefore leading to positive social change.

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Dedication

I dedicate this dissertation to my family and friends who have supported me throughout this journey to obtain my doctoral degree. I can never adequately express how much I appreciated your words of encouragement, prayers, telephone calls, and e-mails that were always on time to keep me motivated toward the finish line.

I dedicate this dissertation to my wife, Ziquora Banks. Maya Angelou stated, "Love recognizes no barriers. It jumps hurdles, leaps fences, penetrates walls to arrive at its destination full of hope." Since the time we met while I was serving in the United States Army, you have always demonstrated love can break down barriers. Hard work and dedication have been the recipe we built together to accomplish what we set out to do. A dissertation journey is full of sacrifice, but you my love, have sacrificed the most. You have supported me physically, emotionally, and mentally, which provided me the motivation and strength to complete this doctoral journey. You are my gift from God, my queen, and my best friend. I dedicate this dissertation to you!

Acknowledgments

First, I would like to thank my Lord and savior Jesus Christ for granting me wisdom, favor, and strength to complete this journey. During this doctoral journey, I meditated on a scripture in Psalms 23, which I also keep posted on my wall. This verse reminds me to keep driving forward, even when walking through the valley of tough obstacles to show me the fight to complete my mission.

To Ziquora Banks, my best friend and my wife of 4 years, I am eternally grateful for your unwavering support throughout my life. I will never forget the card you bought to encourage me during one of my low points of this doctoral journey. To Jashon, Jr., my 17-month-old son, you are my joy and inspiration. Remember that God created you both for a purpose and you both are world changers.

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A special thanks to Dr. David DiBari and James Scott Frampton, my dissertation committee members, for your expertise and constructive feedback that helped me produce a quality dissertation. In addition, I am grateful for the support and tutelage of Steve Creech.

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Chapter 1: Introduction to the Study

The prevalence of violence in low-income, urban communities is high (Goldner, Gross, Richards, & Ragsdale, 2015), and violence disproportionally affects young people of color (Davis, 2014). Similarly, there is a high prevalence of combat-related post-traumatic stress disorder (PTSD) among military personnel returning from deployment (Resick et al., 2015). Though these situations may seem unrelated, media like Spike Lee's film, *Chi-Raq*, shows how gang violence erupting on Chicago's Southside neighborhoods creates combat-like conditions that lead may lead to PTSD. People can be exposed to violence as victims or as witnesses of violent acts, increasing a victim's likelihood of adverse health and behavioral outcomes (Seal, Nguyen & Beyer, 2014). It is estimated that between 50% and 96% of urban individuals have witnessed or experienced some form of violence in their community (Seal et al., 2014). PTSD has been related to mental health issues that urban violence victims endure, which can be attributed to loss of family members due to violence (Seal et al., 2014). The results of this study may affect positive social change in urban areas of high violence by (a) helping families of victims with a mental illness caused by violence; (b) helping families of victims understand the relationship between urban violence and combat PTSD; (c) enhancing the understanding of PTSD due to the environment; (d) providing families with information addressing PTSD, violence, and outcomes of mental illness; and (e) contributing and implementation of programs that enhance PTSD and urban violence families of victims.

In the United States, it is currently estimated that 6.8% of adults age 18 or older have PTSD (Whitworth & Ciccolo, 2016). PTSD is due to various reasons such as domestic abuse, child neglect, and depression. The prevalence of PTSD among soldiers

who have experienced combat in recent wars is greater than 20%, which increases the importance of understanding factors that are associated with PTSD and combat (Loew et al., 2014). The U.S. military personnel are one of the largest subgroups diagnosed with PTSD, which can affect military ranks, causing a lack of readiness for deployments and dysfunction in the workplace (Xue et al., 2015). Similarly, empirical studies have shown that PTSD (Molendijk, Kramer, & Verweij, 2016; Beidel, Stout, Neer, Frueh & Lejuez, 2017; Wangelin, & Tuerk, 2014; Santilli et al., 2017) has similar effects on victims of urban violence (Davis, 2014; Seal et al., 2014; Whitworth & Ciccolo, 2016; Goldner, Gross, Richards, & Ragsdale, 2015). Victims of urban violence might have been affected by PTSD due to the environment and because of their combat-like neighborhood. Therefore, this study can bring attention to the violence occurring in the urban communities and the development of PTSD from combat-like neighborhoods.

Chapter 1 presents an examination of the study and the background as it relates to victims of urban violence. The problem statement has identified the issues and perceptions of victims of urban violence whether urban violence impacts mental illness such as PTSD. The purpose of the study, research questions, hypotheses, limitations of the study, and assumptions of the study will also be explored. Chapter 1 will conclude with definitions of terms, theoretical foundation, nature of the study, significance of the study, and summary.

Background of the Study

Victims of urban violence have been facing an increase in violence against one another, between gangs, and innocent people. Not only do families of these victims receive little justice from the criminal justice system, they also suffer the loss of a family

member. It is estimated that between 50% and 96% of urban individuals have witnessed or experienced some form of violence in their community (Seal et al., 2014). Those living in more disadvantaged environments witness violence at higher rates than those living in less disadvantaged environments, which leads to increased risk for adverse outcomes (Seal et al., 2014). There are four facets of community that can be used to measure violence in communities with urban violence victims: the membership, reinforcement of needs, influence, and shared emotional connection (McMillan & Chavis, 1986). Using these measures, the results of the study may provide victims of urban communities with a better understanding of PTSD and how it varies in different situations.

The dominant conceptualization of PTSD is reflected in the Diagnostic and Statistical Manual of Mental Disorders (DSM). PTSD was introduced in the DSM in 1980 (Molendijk et al., 2016). Post-traumatic illness is defined by two criterions: exposure to a traumatic event and a set of psychiatric symptoms that develop because of this exposure (Molendijk et al., 2016). These traumatic events create avoidance of confrontation about the events that triggers the behavior, and there are reoccurring visions from the level of exposure from these events. To address PTSD, trauma management therapy was developed in the mid-1990s, which is a multicomponent behavioral treatment (Beidel et al., 2017). This method was developed for Vietnam War veterans who were suffering from anger, social isolation, sleeping problems, and depression. There are two parts to this component: intensive individual therapy and social and emotional rehabilitation. Combined, these therapies help individuals cope with the traumatic event and skills training. Additionally, the dominant approach in psychological

PTSD research is cognitive psychology and cognitive behavioral therapy as opposed to psychoanalytic and psychodynamic approaches (Molendijk et al., 2016).

Operation Iraqi Freedom and Operation Enduring Freedom in Iraq and Afghanistan brought new analysis on PTSD and functionality among men and women service members. Since 2001, over 2.5 million troops have been deployed to Iraq or Afghanistan, many of whom have experienced direct combat and sustained threats (Wangelin, & Tuerk, 2014). There are also military veterans from previous wars such as the Vietnam War, Gulf War, Desert Shield/Desert Storm, and Operation Iraqi Freedom/Operation Enduring Freedom who are suffering due to the lack of resources provided by the Department of Veteran Affairs. Estimates of PTSD rates related to these wars range from 8% to over 20%, or 192,000 to 480,000 individuals (Wangelin, & Tuerk, 2014). To validate the effects of combat post-traumatic stress symptomology (PTSS), the Impact of Events Scale-Revised (IES-R) instrument is a self-report measure that assesses subjective distress caused by traumatic events. However, the focus has been on those with PTSD from military backgrounds. The current study addresses this gap in the literature though an examination of the relationship between urban violence and PTSD. Therefore, findings in this study can provide victims of urban violence with alternative ways of thinking about violence in the community and assist victims with the mental challenges of PTSD.

Problem Statement

PTSD is commonly associated with those who have served in areas of conflict or combat zones in the United States military. However, the violent encounters happening to urban victims may have the same effect of combat-related traumatic events military

personnel encounter when in combat areas. Victims of urban violence and their family and friends experience trauma and potential PTSD injuries, meaning there are community needs that need to be addressed. Though the prevalence of combat-related PTSD among military personnel returning from deployment to Iraq and Afghanistan ranges from 5% to 45% (Resick et al., 2015), the prevalence rates of victims who have exposure to violence in low-income, urban communities range between 50% and 96% (Goldner et al., 2015).

U.S. military forces have encountered many traumatic stressors, including insurgent ambushes, firefights, and improvised explosive device attacks (Walters, 2014). But urban families have been impacted by violence in their community by gang violence and shootings (Beard et al., 2017). Victims of color, especially in high-density, under-resourced urban communities, are more affected by violence than other racial or ethnic groups (Goldner et al., 2015). Families in the urban community suffer from combat-related trauma from the violence of gang shootings and near-death altercations due to cultural patterns that lead to desensitization to violence. Violence in the urban communities is a traumatic event with potential psychological effects. More than 20% of injured trauma survivors have symptoms consistent with a diagnosis of PTSD even after acute care or inpatient hospitalization (Santilli et al., 2017). Therefore, I investigated the relationship between urban violence and PTSD. This study can help to develop strategies that can fill the gaps in research on aiding victims of urban violence.

Purpose of the Study

The purpose of the quantitative correlational study was to examine whether a relationship exists between PTSD and victims of urban violence in Cook County, Illinois. The dominant PTSD concepts or post-traumatic illnesses are a set of psychiatric

symptoms that develop due to exposure of threatened or actual violence (Molendijk et al., 2016). The independent variables included membership, reinforcement of needs, influence, and shared emotional connection and the dependent variable of PTSS. The variables were measured using a survey instrument designed to access the elements of membership, influence, reinforcement of needs, and shared emotional connection. This study brings attention to the violence occurring in the urban communities and the development of PTSD from combat-like neighborhoods. The results of this study can lead to positive social change in urban areas of high violence by (a) helping families of victims with a mental illness caused by violence; (b) helping families of victims understand the relationship between urban violence and combat PTSD; (c) enhancing the understanding of PTSD due to the environment; (d) providing families with information addressing PTSD, violence, and outcomes of mental illness; and (e) contributing and implementing of programs that enhance PTSD and urban violence families of victims.

Research Question and Hypotheses

Research Question 1: What, if any correlation exists between self-reported post-traumatic stress symptomatology and the amount of self-reported reinforcement of needs among residents from Cook County, Illinois?

$H_0$1: There is no correlation between post-traumatic stress symptomatology and self-reported reinforcement of needs among residents from Cook County, Illinois.

H_a1: There is correlation between post-traumatic stress symptomatology and reinforcement of needs among residents from Cook County, Illinois.

Research Question 2: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois?

$H_0$2: There is no correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

H_a2: There is correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

Research Question 3: What, if any correlation exists between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois?

$H_0$3: There is no correlation between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois.

H_a3: There is correlation between post-traumatic stress symptomatology and the amount of self-reported influence among residents from Cook County, Illinois.

Research Question 4: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois?

$H_0$4: There is no correlation between post-traumatic stress symptomatology and the amount of self-reported shared emotional connection among residents from Cook County, Illinois.

H_a4: There is correlation between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois.

Research Question 5: Which, if any combination of two or more self-reported sense of community scores (membership, influence, shared emotional connection, or reinforcement of needs) collectively better predicts post-traumatic stress symptomatology than any single measure of sense of community alone, among residents from Cook County, Illinois?

$H_0$5: There is no correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

H_a5: There is correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

Theoretical Foundation

Albert Bandura's self-efficacy theory was used as the theoretical foundation for this study. It suggests that people foster beliefs about their capabilities to produce designated levels of performance that influence their lives. Additionally, human behavior is explained in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences (Bandura & Adams, 1977). PTSD is a mental health issue that is not only happening in the U.S. military forces but possibly urban areas that have a large population of victims of color with high rates of violence. The self-efficacy theory helps address how people's beliefs in their coping capabilities affect how much stress and depression they experience in threatening or difficult situations as well as their level of motivation (Bandura & Wessels, 1994). In the urban community, there are anxiety issues

that individuals may experience from the violent encounters happening and causes of PTSD for families that are victims of this behavior.

In addition to self-efficacy theory, social conflict theory served as a guiding framework explaining that individuals and groups (social class) in society interact based on conflict. Social conflicts arise when resources, status, and power are unevenly distributed between groups in society, and these conflicts become the engine for social change (Coser, 1957). Social conflict theory suggests that the professional, powerful, and wealthy people represent the elite and ruling class in society (Bystrova & Gottschalk, 2015). The theory also suggests that class conflict causes crime in any society and that those in power create laws to protect their rights and interests (Bystrova & Gottschalk, 2015). Social conflict theory best fit the framework because it encompasses a broad range of social phenomena. These elements are class, racial, religious, and communal conflicts; riots, rebellions, revolutions, strikes and civil disorders, marches demonstrations, and protest gatherings (Oberschall, 1978). This theory of social conflict was appropriate because internal interaction between social class and crime has been a continuous process and both serve as elements in this study.

Nature of the Study

The nature of this quantitative correlational study was designed to examine whether a relationship exists between the independent variables (membership, influence, shared emotional connection, and reinforcement of needs) and the dependent variable (PTSS). The Sense of Community Index-2 (SCI-2) developed by McMillan and Chavis (1986) was used to describe the process to produce the sense of community. Victims of color, ethnic minorities, and urban residents are at increased risk for witnessing violence

and have higher rates of PTSD, depression, distress, aggression, and externalizing behavior disturbances from witnessing violence. The IES-R was developed by Weiss and Marmar (1996) and is a self-reported measure that assesses subjective distress caused by traumatic events. This survey was helpful in measuring the effect of routine life stress, every day acute stress, which constitute different levels of PTSD. The use these methods is designed to provide systematic information about the phenomenon such as PTSD in the urban community.

A correlational design involves examining the relationship between variables to test hypotheses or research questions. Correlation depends on comparing two distributions of scores that are broadly dispersed along two dimensions (Rudestam & Newton, 2015). Correlational studies typically cannot assign random subjects to different groups but can examine whether a correlation exists. Correlational studies are used to evaluate quantitative data and can provide a foundation to conduct appropriate inferential statistics. Correlational statistics describe and measure the degree or association or relationship between two or more variables or sets of scores (Creswell & Creswell, 2017). Therefore, a correlation approach is the most appropriate method of research for the study compared to other methods of research.

Definitions

Below is a list of the conceptual and operational definitions to define the key terms in the context of the study.

Impact of Events Scale-Revised (IES-R): Self-report measure that assesses subjective distress caused by traumatic events. The IES-R contains seven additional items related to the hyperarousal symptoms of PTSD. Respondents are asked to identify a

specific stressful life event and then indicate how much they were distressed or bothered during the past seven days by each "difficulty" listed. (Department of Veterans Affairs, 2017).

Self-reported influence: "Influence is a bidirectional concept. In one direction, there is the notion that for a member to be attracted to a group, he or she must have some influence over what the group does" (McMillian & Chavis, 1986, p. 11).

Self-reported membership: "Membership is a feeling that one has invested part of oneself to become a member and therefore has a right to belong. Membership has boundaries; this means that there are people who belong and people who do not" (McMillian & Chavis, 1986, p. 9).

Self-reported reinforcement of needs: "Reinforcement as a motivator of behavior is a cornerstone in behavioral research, and it is obvious that for any group to maintain a positive sense of togetherness, the individual-group association must be rewarding for its members" (McMillian & Chavis, 1986, p. 13).

Self-reported shared emotional connection: "is based, in part, on a shared history. It is not necessary that group members have participated in the history in order to share it, but they must identify with it. The interactions of members in shared events and the specific attributes of the events may facilitate or inhibit the strength of the community" (McMillian & Chavis, 1986, p. 13).

Sense of community index (SCI-2): "The SCI is based on a theory of sense of community stated that a sense of community was a perception with four elements: membership, influence, meeting needs, and a shared emotional connection" (McMillan and Chavis, 1986, p. 8).

Post-traumatic stress disorder (PTSD): A mental health problem that some people develop after experiencing or witnessing a life-threatening event, like combat, a natural disaster, a car accident, or sexual assault (Department of Veterans Affairs, 2017).

Urban violence: "Interpreted in its sociological sense and as an interplay between stereotyped representations and the reality that 'dangerous classes' experience in their environment" (Body-Gendrot, 1995, p. 526).

Assumptions

This research topic was selected to examine the relationship between victims of urban violence and PTSD. One assumption is that Bandura and Wessels (1994) self-efficacy theory and Bystrova and Gottschalk (2015) social conflict theory provides explanation of the research topic, which justifies the instruments that were used for data collection of this research. Another assumption is that victims of urban violence involved in the study understood the survey questions on the SCI-2 to provide honest and accurate responses. A further assumption was that the sample was representative of the larger population of victims of urban violence in the United States.

Scope and Delimitations

The scope of this quantitative correlational research study included a self-administered internet surveys to examine the relationship between victims of urban violence and combat PTSD. The victims of urban violence were assessed with the SCI-2 used to measure PTSD, traumatic experiences, and the range of qualifying stressors of memberships, influence, reinforcement of needs, and shared emotional connection (see Harville, Jacobs, & Boynton-Jarrett, 2015). In addition to the IES-R questions, the survey includes questions from the IES-R, which is a self-reported measure that assesses

subjective distress caused by traumatic events. The targeted sample included organizations from Cook County, Illinois in the urban communities. Therefore, one delimitation for the study was that only urban community members of geographical area were selected to participate in the internet study. Another delimitation of this study was that victims that have children under the age of 18 were excluded from the study.

Limitations

For this study to make a significant impact for the victims of urban violence and PTSD literature, it was necessary to recognize limitations in this study. A correlational design describes and measures the degree or association (or relationship) between two or more variables or sets of scores (Creswell & Creswell, 2017). The first limitation is that correlational methods do not equate to causation (Creswell & Creswell, 2017). A second limitation of the study is the use of a self-reporting questionnaire that could increase the risk of participants not answering all the questions in a most accurate and honest manner.

A third limitation is the convenience purposive sampling method, which involves identification and selection of individuals or groups of individuals that are proficient and well-informed with a phenomenon of interest. The population consisted of victims of urban violence who agreed to participate in this study, which included 83 residents from Cook County, Illinois. Convenience sampling methods involved a nonprobability sample, which can affect validity; however, sampling methods are intended to maximize reliability and validity (Palinkas et al., 2015). Despite this limitation, this method was to provide the appropriate cross section of victims of urban violence in medium and large urban metropolitan cities.

Significance of the Study

This research contributes to an emerging field about PTSD affecting urban communities that have high rates of violence. This study can impact public policy in the efforts to change events such as school shootings and other violent actions by individuals suffering from mental health disorders. The results of this research can provide insight about the violence occurring in urban communities and PTSD from these conditions, which may aid politicians, community leaders, and families in developing solutions. This study provides the rationale for using similar solutions for urban violence PTSD victims that are currently being providing to military soldiers with combat-related PTSD. The social change implications also include the understanding of how families in urban communities suffer from the same post-traumatic stress as U.S. military personnel.

Summary

Victims of urban violence are facing health-related challenges when exposed to violence in their community. The mental health aptitude of urban violence victims dealing with PTSD has become more complex and dynamic outside of military combat. For example, victims of urban violence cope with challenges of gang violence and socioeconomic disparities. Therefore, social conflict theory was used because social conflicts arise when resources, status, and power are unevenly distributed between groups in society; these conflicts become the engine for social change (Coser, 1957). Additionally, Bandura's theory of self-efficacy was used because it describes the persistence of coping efforts in the face of anxiety-provoking situations. A quantitative correlational study was the most appropriate method to examine whether a relationship exists between victims of urban violence and PTSD.

Chapter 2 is a literature review that contains synthesis of current research related to the research problem, hypotheses, and research question. Chapter 3 will include the selection of quantitative correlational design method for this study and an explanation of the design derived from the research problem. Chapter 3 will also provide a description of research procedures, the survey instruments, data collection, and analysis of the data. Chapter 4 includes all the demographics and characteristics of the respondents who completed the Internet-based survey. The chapter is designed around the research questions and the hypotheses. Chapter 5 includes the interpretation of the research findings. The chapter also includes the implications for social change in society, offers recommendations for the changes to happen, and identifies the areas for future research.

Chapter 2: Literature Review

PTSD is commonly associated with those who have served in areas of conflict or combat zones in the U.S. military. However, urban violence victims may suffer from the same effects of combat-related traumatic events (Resick et al., 2015). Violence is a major risk factor for the development of mental disorders (Jaen-Varas, Mari, Coutinho, Andreoli, Quintana, de Mello & Ribeiro, 2016), which indicates that PTSD exists in victims of families that have been exposed to violence in urban areas. Therefore, the purpose of the quantitative correlational study was to examine whether a relationship exists between PTSD and victims of urban violence in Cook County, Illinois. The dominant PTSD concepts of post-traumatic illness are a set of psychiatric symptoms that develop due to exposure to threatened or actual violence (Molendijk et al., 2016). This study can bring attention to the violence occurring in the urban communities and the developing of PTSD from the combat-like neighborhoods.

Chapter 2 contains an analysis of empirical research on victims of urban violence and PTSD that informed the understanding of the phenomenon that victims of violence are facing daily. The first section of this chapter consists of the foundation of PTSD. It will conclude with a literature review on the relationship of PTSD and traumatic events. The second section will contain the theoretical foundation of PTSD, including military combat-related post-traumatic stress. The third section begins with the changes in development of PTSD with military personnel and includes the changes in mental health, new emerging trends, and the outcomes of recent war personnel with effects from PTSD. The final section includes a discussion of the relationship between prior research and this quantitative correlational study (see Figure 1).

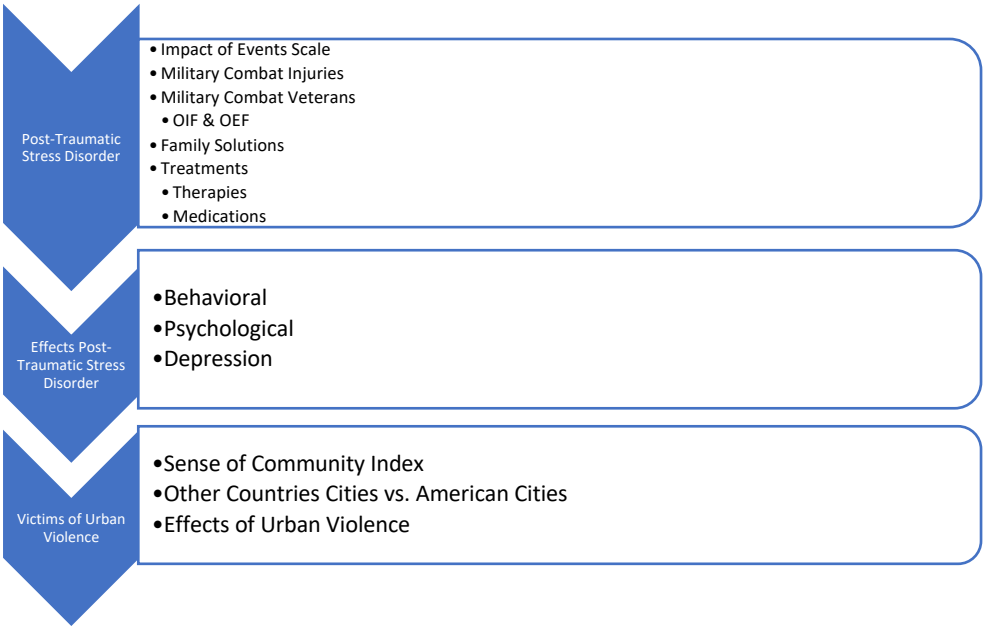

Figure 1. Graphic represent the interrelationships and theories that inform the literature review.

Literature Search Strategy

The literature review consisted of primary sources such as peer-reviewed journal articles, books, professional websites, and federal government publications. The articles were accessed through the Walden University databases: ProQuest, EbscoHost, Criminal Justice Database, PsycInfo, Health Sciences, and Counseling. Extensive database searches were conducted using keywords including *urban violence, post-traumatic stress disorder, combat veterans, OIF/OEF,* and *urban city gang violence.* There were variations of terms (e.g., *violence, victims, PTSD,* and *combat wars*) also used to locate articles. The search strategies led to over 20,000 articles, of which 5,000 pertained to the topic of PTSD.

Theoretical Foundation

In psychology, the correlation between human violent behavior and combat PTSD is a new phenomenon. To examine this phenomenon, Bandura's theory of self-efficacy helped examine how long people will persist in the face of obstacles and adverse experiences (Bandura & Adams, 1977). The stronger individuals' self-efficacy is perceived, the more active their coping efforts are to adverse situations (Bandura & Adams, 1977). Additionally, Coser's (1957) social conflict theory helped in looking at the function of establishing and maintaining group identities as well as analyzing conflict as a form of socialization.

Self-Efficacy

People who are subjected to threatening activities can eventually overcome inhibitions, but those who avoid what they fear, or who cease their coping efforts prematurely, will retain their self-debilitating expectations and defensive behavior (Bandura & Adams, 1977). Even the association of neutral events with traumatizing stimulation can create anxiety and defensive behavior (Bandura & Adams, 1977). Perceived efficacy enhances psychosocial functioning through its effects on behavior, efforts, persistence, and self-guiding (Bandura, Adams, Hardy, & Howells, 1980). The findings related to PTSD can trace back to the Bandura's theory of self-efficacy.

Bandura's (1994) model consists of four components with four facets of the factors affecting self-efficacy:

- Enactive attainment: the most effective way of creating a strong sense of efficacy is through mastery experiences. Successes build a robust belief in personal efficacy.

- Modeling: creating and strengthening self-beliefs of efficacy is through the vicarious experiences provided by social models.
- Social persuasion: strengthening people's beliefs that they have what it takes to succeed.
- Psychological factors: modifying self-beliefs of efficacy is to reduce people's stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states.

Additionally, the facets are adaptable and self-motivating but also have a difference in self-efficacy as it correlates to different world views. Self-efficacy plays an impactful role in this study by identifying coping capabilities, as it affects how much stress and depression experiences in threatening or difficult situations such as urban violence or military combat.

Social Conflict Theory

Although self-efficacy is associated with social cognitive theory, it can also be linked to Coser's (1957) social conflict and the theory of social change. Coser stated that the idea of conflict within and between groups in a society can prevent accommodations and habitual relations from progressively impoverishing creativity in community relations. Social conflict also refers to interactions by parties in pursuit of their goals are likely to inflict damage, harm, or injury (Obersehall, 1978). Coser contended that some groups of people are conflicted by the share of power, wealth, and status. The theoretical foundation of the current study is a reflection of how society views individuals in the violent urban areas of the country who are suffering from PTSD. According to Coser, conflict leads not only to changing relations in the existing social structure, but the total

social system transforms from such conflict. Lower-income and impoverished communities experiences more conflict due to a myriad of reasons. For instance, lack of employment, broken educational systems, and people of these urban communities fail to advance. Figure 2 depicts how both theories tie into the relationship of victims of urban violence and PTSD.

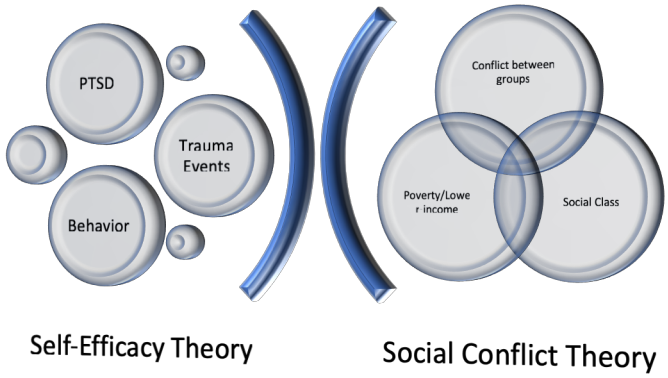

Figure 2. The relationship of theories related to this study.

Post-Traumatic Stress Disorder

The review of the literature indicated that the lack of clarity exists in the field of research on the definitions, constructs, and measures of PTSD. A cluster of symptoms typically define PTSD, which includes the reexperience of traumatic events, nightmares, flashbacks, avoidance of people or places, depression, trouble concentrating, irritability, and hypervigilance (Sparks, 2018). These are the most common side effects of PTSD; however, the focus of recent research has been on military combat symptoms of post-traumatic events that have happened to separate individuals. A traumatic event refers to a

situation of a sudden, brutal, and unusual exposure to a life-threatening or serious threat to physical integrity (Boudoukha, Ouagazzal, & Goutaudier, 2017).

Research on PTSD has also suggested the importance of addressing potential behaviors. To protect against the likelihood of engaging in violent or aggressive behavior, individuals must process through trauma and decrease symptoms of PTSD (Kern & Perryman, 2016). Physical altercations are more than likely to happen when a situation reminds the individual of an event that has taken place from combat. Screening for PTSD in acutely ill patients may decrease the prevalence of patients that will progress to PTSD, therefore improving their long-term physical and psychological outcomes (Sparks, 2018).

Impact of Events Scale-Revised (IES-R)

The instrument for understanding the impact of traumatic experiences on the thoughts and behaviors of patients requires optimal assessment of their subjective responses to their traumatic experience (Salsman, Schalet, Andrykowski, & Cella, 2015). For the current study, the IES-R is defined as a measure developed to assess the impact of traumatic life events and is one of the most widely used measures of event-specific distress (Salsman et al., 2015). The IES-R includes a subscale assessing autonomic arousal to mirror the three symptom clusters of PTSD: intrusions, avoidance, and hyperarousal. Salsman, Schalet, Andrykowski, and Cella (2015) noted the IES-R was designed to measure the presence of alternating cycles of intrusions such as unwanted thoughts and images of the traumatic event emerging into consciousness and avoidance expressed by efforts to avoid thinking about the traumatic event.

Traumatic Events and Post-Traumatic Stress Disorder

A review of current literature revealed a debate regarding whether traumatic events trigger PTSD. However, there are many studies supporting the idea that traumatic incidents lead to PTSD (Boudoukha et al., 2017; Hall-Clark et al., 2017; Hijazi, Keith, & O'Brien, 2015; Johnson, Eick-Cost, Jeffries, Russell & Otto, 2015; Jordan, Eisen, Bolton, Nash & Litz, 2017; Lancaster, Cobb, Lee & Telch, 2016; Lichtenberger et al., 2018; Shea, Presseau, Finley, Reddy & Spofford, 2017). For example, characteristics of a traumatic event are predictors of posttraumatic symptoms, whereas other characteristics are predictors of nonspecific symptoms (Boudoukha et al., 2017). Dissociation during the traumatic event and a history of trauma exposure has been shown to be the strongest predictors of the development of PTSD (Boudoukha et al., 2017). Though there was a lack of literature on PTSD and urban violence, literature helped examine the relationship between traumatic events and PTSD, which both military personell and victims of urban violence experience.

One of the predictors of PTSD is whether inury occurred. Several studies have indicated that a significant relationship exists between traumatic events and combat injuries (Boudoukha et al., 2017; Johnson et al., 2015; Jordan et al., 2017; Lichtenberger et. al., 2018). Traumatic brain injury is described as one of the signature injuries of troops wounded in Afghanistan and Iraq (Johnson et al., 2015). Veterans with more deployments and exposure to combat tend to have more significant injuries than veterans who have deployed to noncombat areas. The impact of traumatic exposure characteristics (type of exposure, categorical form, number of exposures, and the age of the exposure) on a traumatic event are predictors of post-traumatic symptoms (intrusion, avoidance,

negative cognitive impairment) and nonspecific dissociative symptoms (Boudoukha et al., 2017). Additionally, during Operation Enduring Freedom and Operation Iraqi Freedom from 2003 to 2011, penetrating injuries were the most common mechanisms of thoracic injury, constituting 67% of thoracic trauma (Lichtenberger et. al., 2018). Although researchers have conducted studies on various injuries, minimal research exists on the relationship between traumatic events and combat injuries.

In addition to physical injuries, exposure to situations such as serving in a war zone can involve exposure to negative aspects of humanity and mortality (Shea et al., 2017). For example, post-traumatic stress may be in response to surviving adversity during captivity (Hijazi, Keith, & O'Brien, 2015). Frequent exposure can also include the experience of personal life threat, witnessing the death or severe injury of others, or being responsible for the death or severe injury of others (Shea et al., 2017). Additionally, the relationships among combat exposure and four PTSD symptom clusters (reexperiencing, avoidance, numbing, and hyper arousal) and symptoms of guilt, depression, and anxiety has shown an association between traumatic events and PTSD (Shea et al., 2017). In the event of combat, the stressors are high; combat-exposed military personnel are 4-5 times more likely to develop PTSD relative to those deployed but not exposed (Lancaster et al., 2016). The relationship between traumatic events and PTSD is stronger when military personnel involved in combat violence during deployments overseas (Hijazi et al., 2015).

PTSD has a negative effect on the cognitive processes and symptoms persist for 30 days or more. People with post-traumatic stress syndrome will eventually progress to PTSD; therefore, early recognition of PTSS may improve the long-term psychological outcomes of patients who have been exposed to traumatic events (Sparks, 2018). The link

between traumatic events and PTSD have been shown in the research, though more information can be gathered to explain the phenomena (Sparks, 2018). For example, the latest medical conditions of PTSD require examining the relationship between traumatic events and combat injuries of military personnel, unlike early research that has been focused on measuring cognitive dysfunction of behaviors.

Military Combat Veterans

The theme in contemporary literature is that military combat has become a common practice dealing with symptoms of PTSD. Since 2001 over 2.5 million troops have been deployed to Iraq or Afghanistan, many of whom have experienced direct combat and sustained violent threats (Wangelin & Tuerk, 2014). About 2.5 million military personnel who had direct experience or sustainable threat from combat-related events would have been deployed across seas (Wangelin & Tuerk, 2014). Combat exposure or war-zone exposure is commonly associated with military service, especially with Iraq and Afghanistan deployments (Godfrey et al., 2015). Current service members who report combat exposure rates up to 65% depending on the branch of service, location of deployment, and type of combat exposure. Combat exposure can affect cognitive functioning explained by the inclusion of combat-like environment in the Middle East (Troyanskaya et al., 2015). However, without a traumatic brain injury or PTSD, combat exposure is hard to measure cognitively.

War may be one of the most challenging situations that a human being can experience, and physical, emotional, cognitive and psychological demands of a combat environment place stress on military personnel (Rizzo et al., 2015). An outcome of combat experience in Operational Iraqi Freedom/Operation Enduring Freedom veterans

has shown that returning Iraq soldiers with greater exposure to combat experiences displayed increased physical and verbal aggression toward others (Afari et al., 2015). Operational Iraqi Freedom/Operation Enduring Freedom veterans' exposure to combat significantly correlated with aggressive urges, difficulty managing anger, and problems controlling violence (Afari et al., 2015). Additionally, a review of the literature on soldiers deployed in Operational Iraqi Freedom/Operation Enduring Freedom revealed a number of researchers who provided evidence that soldiers deployed suffered post-traumatic stress; however, findings differed based on gender and race (Afari et al., 2015; Hall-Clark et al., 2017; Rizzo et al., 2015). For example, Hall-Clark et al. (2017) found that PTSD symptoms and self-blame internal attributions of traumas were significantly related in African Americans but not in Whites.

War and terrorist attacks are also a risk for development of PTSD from the exposure to violence and bomb blast from improvised explosive devices (Rizzo et al., 2015). Trauma experienced from acts of terrorism can have such a significant effect on the psychological well-being of the civilian population. For example, the World Trade Center attacks of September 11, 2001, were unprecedented with the unique impact of loss of thousands and disaster workers exposed to hazardous duty. These dramatic geopolitical events have put a profile on the impact of trauma on victims.

Service members from diverse cultures, ethnicities, and racial groups may experience or cope with high-magnitude, war-related events differently, and may be at greater risk for PTSD (Hall-Clark et al., 2017). In the ranks of the military, many of the minority soldier facing challenges battling PTSD will have limited access to clinics and treatments. Hall-Clark et al. (2017) states the differences in values, worldviews, and

sociocultural experiences, racial/ethnic minorities possibly respond to trauma in culturally specific ways, which may be reflected in post-traumatic cognitions about the self, others, and the world. Furthermore, self-blame was associated with higher dissociation PTSD, and substance abuse disorders, that vary according to race/ethnicity and education (Hall-Clark et al., 2017). Hall-Clark et al. (2017) noted that ethno-racial minorities have also endorsed more negative thoughts about themselves, negative cognitions about the world, and self-blame against themselves.

Family Solutions

Theliterature review showed that empirical evidence is increasing regarding the relationship between PTSD and military families experiencing parental changes (Chesmore, Piehler & Gewirtz, 2018; Saltzman, Lester, Milburn, Woodward & Stein, 2016; Hollingsworth, Dolbin-MacNab & Marek, 2016; Banneyer, Koenig, Wang & Stark, 2017). The current studies have supported the relationship between PTSD and military families (Lester et al., 2016; Brockman, et al., 2016). Furthermore, these studies endorsed the perspective of PTSD before and after deployments and the effects it has on the family.

Since 2001, 40% of U.S. service members deployed to Iraq and Afghanistan are parents (Chesmore, Piehler, & Gewirtz, 2018). Military combat-related deployments create stressors that are associated with changing roles that children have to adjust with their parents. Chesmore, Piehler, and Gewirtz (2018) noted during wartime deployment, many families experience repeated cycles of separation and are often left feeling anxious and fearful for the safety of their loved one. Brockman et al., (2016) stated that parenting and co-parenting may be diminished or disrupted, as reflected in less effective limited

setting and discipline, reduced positive involvement and warmth, inconsistent use of positive contingencies to promote children's skills, and reduced monitoring. These challenges of uncertainty and strain that are associated with deployment absences, but the majority of military service member's intimate partners and children show considerable resilience in the face of these significant and impactful changes. Brockman et al., (2016) noted little is known about how service members' experiences with trauma during deployment, post-deployment adjustment, and experiential avoidance play role in the interactions with spouses and children.

Higher rates of substance use, risky behaviors and internalizing symptoms have been found in adolescent youth from military families (Lester et al., 2016). Children of deployed parents suffer from wartime experiences that influence the social and emotional development through the impact of deployment on family adjustments. Parental wartime service has a range of possible challenges for children over the length of service, which include separation from parents in the context of danger and rapid frequent changes in family roles. Lester et al., (2016) found that children exposed to separations from a primary caregiver may also experience disruptions in attachment relationships.

Hollingsworth, Dolbin-MacNab, and Marek (2016) found that more than three million immediate family members left behind during deployment, also had to adjust during deployment and carry on with family life. Despite returning home for wartime combat, parental guidance will not return to status quo, with the normal mother and father roles. Hollingsworth, Dolbin-MacNab, and Marek (2016) states that reintegration happens after the family has reunited, upon return from deployment, and the accommodation of personal and relational changes incurred during the service member's

absence. Re-entering back into the family relationships is a challenging process involving new expectations, new power structures, and varies stressors.

Banneyer, Koenig, Wang, and Stark (2017) states that PTSD is a trauma stressor-related disorder that can result after the experience of a traumatic event during which the survivor was subjected to intense stress beyond that of normal everyday life. Service members returning home from combat are more than likely suffering from PTSD, and this condition can also affect their family members. Banneyer, Koenig, Wang, and Stark (2017) noted that this condition goes untreated in more than 40% of the returning and diagnosed veterans and consequently affects the mental health of families of soldiers that have returned from deployment. Therefore, this study involved examining the relationship between PTSD and military families, including parenting, deployment, and post-deployment.

Treatments

The DSM-V Criteria for PTSD is becoming more accessible and complex as a treatment option. In 1980, the American Psychiatric Association added PTSD to the DSM-III. Anderson and Sellbom (2018) found that this model developed in response to decades of criticism regarding the categorical diagnostic model for personality disorders. The Section III model is a hybrid dimensional and categorical system that have two models, Criterion A and B. Criterion A, the focus of the current study, states that an individual must show personality impairment in the domains of self (identity or self-direction) and interpersonal (empathy or intimacy) functioning (Anderson & Sellbom, 2018). Criterion B stated of the model is a dimensional trait conceptualization of personality psychopathology, which includes five-dimensional personality trait domains

and their accompanying set of trait facets (Anderson & Sellbom, 2018). PTSD is consequently facing a new reality in America with military veterans leaving combat-related traumatic areas and returning home with this mental illness.

Although treatments of PTSD are increasing, many veterans are suffering from this mental illness with a lack of treatment from veteran-based clinics. In addition to performing treatments among military service members, clinics and hospitals continue to perform therapies and prescribe medication. Although treatments in military medicine have adapted to environmental changes from wartime to peacetime, the study may provide treatment options with updated changes to generate organizational change.

Therapies

Treatments have played an essential role in military combat-related veterans that have been a part of the Vietnam War, Operation Iraqi Freedom, and Operation Enduring Freedom. Dinnen, Simiola, and Cook (2015) developed these three elements for PTSD psychotherapies: cognitive-behavioral therapies—namely prolonged exposure cognitive processing therapy, and eye-movement desensitization and reprocessing. These are considered evidence-based psychotherapies for PTSD. Each one of these treatment options are trauma-focused, which involves the processing of traumatic material. Dinnen, Simiola, and Cook (2015) stated that prolonged exposure for patients to trauma, leads to trauma-related situations that are objectively safe but avoided due to trauma-related distress (in-vivo exposure) and to memories of the traumatic event through repeated recounting of the details of the most disturbing event. Cognitive processing therapy assists patients by examining the relationship between unhealthy and distorted thinking patterns related to trauma, and teaching healthier adaptive ways of thinking (Dinnen,

Simiola, & Cook, 2015). Eye movement desensitization and reprocessing works to integrate trauma memories and associated stimuli by asking patients to recall trauma-related images while receiving one of several types of bilateral sensory input (Dinnen, Simiola, & Cook, 2015).

Furthermore, PTSD studies focused on expanding the study of impatient PTSD treatment programs. Campbell, Loeffler, and Pulos (2016) three categories of inpatient PTSD treatment programs in their review of 10 Veterans Affairs (VA) programs: (a) long-stay specialized inpatient PTSD units, (b) short-stay specialized evaluation and brief-treatment PTSD units, and (c) non-specialized general psychiatric units. Consequently, these interviews are conducted with over 250 inpatient PTSD treatment staff members, which is thought to be the most effective methods. Furthermore, inpatient treatment for PTSD provides the opportunity to test the most effective treatment to reduce PTSD symptom quantity and severity.

Medications

Treatments medications have ushered troubling issues with PTSD victims by adopting everyday usage for recreational use to cope with the everyday difficulties of society. Saunders et al. (2015) stated that 2.5 million Americans meet criteria for opioid use disorders. This is a serious epidemic among US military personnel (Saunders et al., 2015). Medications are used to help individual with the psychological effects of this mental disorder, but the clinical doctors are giving large amounts of drugs, which time turn into drug habit. Nawijn et al. (2017) states that medication-enhanced psychotherapy is a possible strategy to increase psychotherapy response in PTSD. These drugs are used to medicate PTSD, but it also manipulates their feelings and thoughts. Nawijn et al.,

(2017) noted patients have less positive feelings, less approach and more avoidance behavior in response to happy faces and positive social memories.

Pharmacotherapy and psychotherapy are effective treatments for PTSD that are cost efficient to the Department of Veterans Affairs. Haller, Myers, McKnight, Angkaw, and Norman (2016) state effective medications include selective serotonin reuptake inhibitors although only sertraline and paroxetine are approved by the Federal Drug Administration for PTSD. Other FDA approved drugs help with nightmares and sleep disturbances are prazosin, which is characterized to help PTSD. Bowe and Rosenheck (2015) claim prescription drug use in veterans with PTSD and substance use disorder has, thus far, largely focused on opioids, benzodiazepines, and antipsychotics. Furthermore, there has been considerable debate on the safety and efficacy of the drugs used for veterans with PTSD.

Effects of Post-Traumatic Stress Disorder

PTSD is a key element to behavioral (Barr, Kintzle, Sullivan, & Castro, 2018; Landy, Pukay-Martin, Vorstenbosch, Torbit, & Monson, 2015; Bryan et al. 2016; Banneyer, Koenig, Wang, & Stark, 2017), psychological (Carleton, Duranceau, McMillan, & Asmundson, 2018; Powell et al., 2015), and depression (Wanklyn et al., 2016; Klaman & Turner, 2016; Bryan & Heron, 2015). Although there is significant research on PTSD and its effects. Minimal research exists on the various elements and symptoms outcomes. For example, for military personnel, PTSD is associated with increased risk for suicide ideation, suicide attempts, and death by suicide, with risk increasing as the severity of PTSD increases (Bryan et al., 2016). There are mechanisms

in place, which confers increase risk of suicidal thoughts but little evidence on the understood behaviors.

Limited empirical research exists on PTSD in the United States to support how behavioral, psychological, and depression effects PTSD. Landy, Pukay-Martin, Vorstenbosch, Torbit, and Monson (2015) conducted research on parental PTSD and how it is associated with parenting difficulties, relationship adjustments, and partners' mental health functioning. Bryan et al., (2016) conducted a research study on cognitive processing therapy to see if it is associated with iatrogenic suicide risk in a sample of active duty United States Army personnel diagnosed with PTSD. Contrary to the previous study, Klaman and Turner (2016) conducted a study on perinatal depression in the military, however in the civilian population it is estimated to be between 5% and 20% suffer from similar combat PTSD as if they were in a deployed combat area. Therefore, this study involved examining the relationship between behavioral, psychological, and depression symptoms of PTSD.

Behavioral

Behavioral symptoms emphasize avoidance, arousal, and cognition symptoms, which could last for more than one month before being diagnosed with this mental illness. Cognitive behavioral symptoms vary upon the situation, but the focus is more directly with military personnel. Suicide has been high-risk behavior that has been in the military ranks for decades. Barr, Kintzle, Sullivan, and Castro (2018) states that comprehensive epidemiological review of over 50 million veteran suicide records collected from 2001 to 2014 indicates that veteran suicide rate has increased by 32% since 2001. Avoiding the changing life rim in the military brings pressure and stressors to

the individual due to some traumatizing events while in the battlefield. Consequently, post-deployment high-risk behaviors engage in a phenomenon that has been described as post-combat invincibility, or the potential for combat veterans exposed to violence and trauma to experience an alteration in perceived invincibility (Barr, Kintzle, Sullivan, & Castro, 2018).

PTSD behavioral symptoms may be effective in certain situations; however, it will have devastating consequences when not treated to prevent high-risk behaviors. In the final analysis, early and effective treatment to reduce PTSD and depression could potentially reduce the risk of suicide in the military (Bryan et al., 2016).

Psychological

Psychological symptoms are vulnerabilities that interact with a traumatic experience to produce an emotional response characterized by hypervigilance, cognitive biases, and avoidance (Carleton, Duranceau, McMillan, & Asmundson, 2018). Chronic pain and sleep quality are some of the main causes of the psychological issues' military personnel have when diagnosed with PTSD. Carleton, Duranceau, McMillan, and Asmundson (2018) state attentional bias for threat serves as a shared cognitive vulnerability for both PTSD and CMP; specifically, individuals with PTSD and CMP attend quickly to diagnosis-congruent stimuli but subsequently avoid such stimuli, maintaining symptoms of anxiety and pain. Combat injuries have a significant effect on the brain function due to the pain levels that could create this attention bias and anxiety to the fact of chronic pain function.

In contrast, sleep quality has declined for military personnel with injuries and chronic pain from other conditions such as PTSD. Powell et al., (2015) states that

impaired sleep and insomnia, both common comorbid conditions in PTSD and traumatic brain injury. PTSD has been associated with individuals' affective experience of pain (anxiety, negative mood, and irritability), rather than with pain severity itself (Powell et al., 2015). Pain is among the most common symptoms described by veterans and has been documented as a prevalent clinical problem in the recent generation of U.S. veterans returning from Iraq and Afghanistan (Powell et al., 2015). These symptoms are commonly associated with PTSD from the pain, anxiety, and sleep disorders; however, PTSD has demonstrated various attentional biases for trauma-related stimuli.

Depression

Similar to behavioral and psychological, depression is another form of well-established comorbidity of PTSD that has received little attention in military veterans. Bryan and Heron (2015) depressive symptoms associated with PTSD, such as social withdrawal and loss of interest, tend to emerge later and are less dramatic than anxiety- and trauma-related symptoms. Consequently, depression victims commonly avoid problem solving, making decisions, or dealing with people in general.

Bryan and Heron (2015) asserts that belonging is strongly correlated with the depression-related symptoms of PTSD such as anhedonia, emotional detachment, hopelessness, sleep disturbance, irritability, and concentration problems. Military veterans are in tight groups of men and women that share a bond with in training and battle. When removed from that type of environment, depression and other medical issues come to the surface, due to rapid changes. Bryan and Heron (2015) state in the military, a sense of belonging is closely connected to the concept of "unit cohesion," which implies a shared commitment to a goal or mission (i.e., task cohesion), social-emotional bonds

among unit members (i.e., social cohesion), and/or pride in group membership (i.e., collective identity). For instance, military veterans will join other established veteran groups to feel the belongingness or the bond that exists to help cope with the change in the environment but also share the similar stories of their heroics. Bryan and Heron (2015) state understanding these relationships could lead to the refinement of effective prevention and treatment strategies designed to reduce emotional distress and enhance adjustment following deployment.

Urban Violence

The literature review provided evidence that victims of urban violence are affected unknowingly from symptoms of PTSD (Jennings-Bey et al., 2015; Patton, Lane, Leonard, Macbeth, & Smith Lee, 2017; Klein, Allison & Harris, 2017; Parker & Stansfield, 2015; Bushman et al., 2016). Even though, significant research on PTSD has been done for military personnel, minimal research exists on the victims of urban violence and street gangs in inner-city areas.

Limited research exists on victims of urban violence in the United States to support how violence affects families mentally and physically. Bushman et al., (2016) asserts that in contrast to aggression, violent behavior is intended to harm another individual who does not want to be harmed. Bushman et al., (2016) state violence is usually defined as aggression with the goal of extreme physical harm, such as injury or death. According to Jennings-Bey et al., (2015) a gang has three or more members, generally aged 12-24. Jennings-Bey et al., (2015) presents that members share an identity, typically linked to a name, and often-other symbols. Patton, Lane, Leonard, Macbeth, and Smith Lee (2017) identified three gang-like behaviors in those

communications: (1) promoting one's gang affiliation; (2) reporting one is part in a violent act; and (3) networking with gang members across the country. Furthermore, gang-related aggression is well known for trolling victims and that of a medium creates disinhibition effect, leading to other behaviors that damage one's own self-image.

Parker and Stansfield (2015) state that personal violence, one of the leading causes of mortality among minorities, and racial disparities in violence have long been public health issues in the United States. In contrast, most minorities are living in conditions of poverty in the lower-income areas of urban areas and tend to suffer from violence amongst one another for survival purposes. For instance, Parker and Stansfield (2015) described the urban violence components as:

(1) High population turnover and increasing population heterogeneity accompany the immigration process, resulting in a lower sense of collective efficacy and a lack of social control through weakened community supervision.
(2) Local economic deprivation may be driven by the intergenerational persistence of low incomes and poor educational outcomes among Blacks, US-born Hispanics, and recent arrivals.
(3) The number of high-risk offenders grows (Hispanic immigrants are on average younger and more likely to be male than the general population).
(4) The structure of the labor market changes and competition for jobs increases.

In the final analysis, environment and culture changes require a decrease in violence among people living in these communities. For example, Parker and Stansfield (2015) found that despite residential progress achieved by African Americans in recent decades, the population remains segregated in neighborhoods with disproportionately

high levels of disadvantage and disinvestment. Segregation in the United States has been an attribute of industrial reconstruction but has been an advantage for the privileged to implement institutional discrimination and increasing social isolation in minority communities. Consequently, Parker and Stansfield (2015) noted there is a positive impact on Black-White segregation on total crime rates.

Sense of Community Index - 2 (SCI-2)

McMillan and Chavis (1986) created an instrument used to distinguished between two major uses of the term community. The first is the territorial and geographical notion of community, neighborhood, town, or city. The second is "relational," concerned with "quality of character" of human relationship, without reference to location. There are four criteria for a definition and theory of sense of community are:

- Membership: is a feeling that one has invested part of oneself to become a member and therefore, has a right to belong (McMillan & Chavis, 1986).
- Influence: is a bidirectional concept, in one direction, there is the notion that for a member to be attracted to a group, he or she must have some influence over what the group does (McMillan & Chavis, 1986).
- Shared Emotional Connection: interactions of members in shared events and the specific attributes of the events may facilitate or inhibit the strength of the community (McMillan & Chavis, 1986).
- Reinforcement of Needs: a motivator of behavior is a cornerstone in behavioral research, and it is obvious that for any group to maintain a positive sense of togetherness, the individual group association must be rewarding for its members (McMillan & Chavis, 1986).

McMillan and Chavis (1986) created four criteria of theory on sense of community involve relationships in which awareness is the foundation. Lastly, McMillan and Chavis (1986) asserted modern society develops community around interests and skills more than around locality.

Overseas Cities vs. American Cities

Urban violence is a phenomenon that tends to occur at the poverty level of living conditions, and also exists not just in American society, but around the world. Urban cities outside the United States have similar issues of poverty, unemployment, and gang violence (Hoelscher & Nussio, 2016; Eduardo, 2016; Rosen, 2017). Consequently, Hoelscher and Nussio (2016) state Latin America is one of the world's most violent regions with violence primarily occurring in cities. Cities throughout Latin America face a range of complex challenges of violence and arrays of motivations, expressions, policy responses, and urban settlements. Hoelscher and Nussio (2016) claim urban social violence in Latin America, often related to political processes such as democratic transitions and social insecurity, economic conditions related to liberalization and socio-economic inequality, and socio-demographic structure associated with informal urbanization and spatial segregation.

Urban violence in the United States of America is a phenomenon that has rapidly occurred due to poverty, lack of education, and lack of employment opportunities. The western democracy has other elements that causes urban violence such as segregation of different ethnicities. Parker and Stansfield (2015) states that one of the major criticisms of existing work on segregation and crime is the predominance of Black-White comparisons and the omission of Hispanic groups. Each group is separate and deals with

different aspects of urban violence. In the U.S., White and Black segregation has been occurring since the 1700's. A growing ethnic group is Hispanics, which are people arriving from Central America into the US are looking for a chance at a better life. Minority groups such as Blacks and Hispanics are living in conditions where violence occurs due to drugs, poverty, and survival. In lower-income urban communities, clustering of Hispanic immigrants in pockets raises the level of White-Hispanic segregation, and the movement of Hispanic immigrants into traditional Black communities, which reduces the level of White-Black segregation (Parker & Stansfield, 2015).

Overseas cities and American urban cities have similar circumstances with violence and different counter measures to reduce violent interactions among groups living in these communities. Eduardo (2016) states both violence and responses to violence are interlinked with broader conflicts and political phenomena that do not fit neatly within city boundaries. Latin America tends to have conflict on political matters rather than community issues, which is where the violence occurs. Poor families experience high residential instability, yet by and large, residents of disadvantaged, high-crime neighborhoods stay put for extended periods of time before moving (Rosen, 2017). American urban cities have housing benefits for the lower-income families, but it is in the areas that are drug infested and full of gang violence where no one would want to live, but considering they have government assistance it is the only place affordable. Therefore, urban violence may ultimately affect the overall livelihood of any individual living in these conditions but creating new avenues of policies may help reduce violent trends in the future.

Effects of Urban Violence

The foregoing literature review provided evidence that urban violence affects outcomes such as organizational crime, insufficient access to basic services, and insecurities (Rosen, 2017; Jennings-Bey et al., 2015; Johnson & Kane, 2018). Johnson and Kane (2018) state the strain of living in the disadvantaged context contributes to the adoption of hyper-masculine presentations of self that emphasize violence, even if such an approach is ineffective at preventing subsequent victimization. To the contrary, Jennings-Bey et al., (2015) found cyclical gang violence as rooted in "multiple marginality," a concept encompassing negatively synergistic layers of discrimination and disadvantage. This study adds to the limited research on urban violence through an examination of the relationship between urban violence and elements of violent outcomes.

Organizational crime has been interjected into urban cities in the lower-income areas due to immigration, drugs, and unemployment. Jennings-Bey et al., (2015) founded that two types of feuding classifications pertaining to clan or gang violence provide insight. Feuding can be classified as either type A, in which there are no institutionalized means by which compensation can be paid, or type B, where payment or compensation can either prevent a counter killing or stop a feud. The lack of mechanisms for breaking cycles of revenge when gang violence is seen as a process that continually creates conflict.

Insufficient access to basic services in urban cities are limited due to large populations of people, cost of living, and limited space. Johnson and Kane (2018) state underground economies in disadvantaged neighborhoods create conditions favorable for

violence, as participants either lack access to criminal justice system resources to settle disputes or regard those resources particularly, the police as illegitimate. Levels of violent crimes is also influenced by levels of structural disadvantage by isolating multiple adjacent socio-economically disenfranchised neighborhoods.

Privileged families that are in quiet and safe neighborhoods, which tend to be the suburbs of an inner-city area, have insecurities about individuals from lower-income backgrounds. Johnson and Kane (2018) claim poverty clustering is measure by the proportion of tracts with poverty rates of at least 40% adjacent to similarly situated tracts, to all tracts with poverty rates of at least 40%. Status anxieties, a history of social rejection, and peer hierarchies also can create conditions that increase the risk of violence (Bushman et al., 2016). Consequently, the effects of urban violence could change the dynamics of an inner city with the people, resources, and crime.

Current Research on Study Topic

Violence is one of the predominant traumatic events affecting the lives of minorities and their communities (Smith & Patton, 2016); although, some studies on urban violence provided evidence that, support the relationship between PTSD and urban violence (Kohl, Gross, Harrison, & Richards, 2015; Smith & Patton, 2016; Nanney et al., 2018). Furthermore, other researchers endorsed the perspective of urban violence in the Hispanic culture due to political reasons (Teche et al., 2017). A review of current research indicated that a relatively small number of researchers have focused on urban violence and PTSD. The results of this study address this gap in the literature through examination of the relationship between victims of urban violence and PTSD.

Although some researchers supported victims of urban violence (Kohl et al., 2015; Smith & Patton, 2016; Nanney et al., 2018; Rosen, 2017; Jennings-Bey et al., 2015; Johnson & Kane, 2018), others supported a mixed perspective of the causes of urban violence (Teche et al., 2017; Hoelscher & Nussio, 2016; Eduardo, 2016). A review of current research indicated that relatively small number of researchers has answered current question that has been unanswered by the existing literature of victims of urban violence and PTSD (Kohl et al., 2015). The results of this study will address this gap in the literature on victims of urban violence in the relationship with PTSD with the similarities of military combat and gang violence.

Summary

Victims of urban violence have become a norm within the communities that have high rates of shootings and individuals of African-American race. The literature review includes analyses and syntheses of research on victims of urban violence and PTSD that inform the understanding of the phenomenon that urban violence victims are facing. Additionally, the literature review encompassed theories and research concerning violence in communities, military combat, and PTSD. The review contained three of empirical research regarding victims of urban violence and PTSD that support the need for further research on the topic under studying.

A review of current literature is a controversial debate regarding whether or not PTSD affects victims of urban violence. Although some researchers supported PTSD (Sparks, 2018; Boudoukha, Ouagazzal, & Goutaudier, 2017; Kern & Perryman, 2016; Johnson, Eick-Cost, Jeffries, Russell, & Otto, 2015; Jordan, Eisen, Bolton, Nash, & Litz, 2017; Lichtenberger et al., 2018). Research on traumatic events from military combat

(Wangelin & Tuerk, 2014; Disner et al., 2017; Godfrey et al., 2015; Troyanskaya et al., 2015). Finally, research on victims of urban violence (Jennings-Bey et al., 2015; Patton, Lane, Leonard, Macbeth, & Smith Lee, 2017; Klein, Allison & Harris, 2017; Parker & Stansfield, 2015; Bushman et al., 2016).

Several researchers from overseas countries provided evidence that a significant relationship exist between victims of urban violence and PTSD (Eduardo, 2016; Rosen, 2017). Growing up in low-income neighborhoods shows a greater likelihood of witnessing stabbings and shootings in their communities than growing up in communities of higher socioeconomic standing (Smith & Patton, 2016). Consequently, economically disadvantaged people growing up in urban contexts are at a greater risk for traumatic exposure, violent injury, and premature death than middleclass individuals growing up in suburban areas (Smith & Patton, 2016). Community violence has been defined as the exposure to violence and violence-related events occurring in or around the home, school, or neighborhood, and may involve physical as well as threatened harm (Kohl et al., 2015). These recent studies have provided evidence to support the relationship between victims of urban violence and PTSD.

Review of the literature indicated a lack of clarity in the field of research on the definitions, constructs, and measures of PTSD. The current study is based upon the most recent PTSD construct: IES-R by Weiss & Marmar (1996). One advantage of the IES-R measurement is that the traumatic events associated with PTSD that supports it. Recent literature provided evidence that IES-R was a stronger predictor of traumatic event factors and consequence scores than other instruments ((Lichtenberger et al., 2018; Boudoukha, Ouagazzal, & Goutaudier, 2017; Johnson, Eick-Cost, Jeffries, Russell, &

Otto, 2015; Jordan, Eisen, Bolton, Nash, & Litz, 2017). The IES-R is not diagnostic for PTSD; however, it is an appropriate instrument to measure the subjective response to a specific traumatic event, which is used to measure the dependent variable in this study. Additionally, a review of the literature showed that IES-R traits measure intrusion, avoidance, and hyper-arousal whereas IES-R is a valid instrument that measure specific traumatic events (Weiss & Marmar, 1996).

The literature review showed that significant evidence was increasing regarding the relationship among victims of urban violence and PTSD (Sparks, 2018; Boudoukha, Ouagazzal, & Goutaudier, 2017; Kern & Perryman, 2016). Additionally, some researchers have supported the relationship between victims of urban violence and military combat (Wangelin & Tuerk, 2014; Disner et al., 2017; Godfrey et al., 2015; Troyanskaya et al., 2015). Although the focus of many of the studies was on communities or minorities, few studies had adult victims as a population. The results of this study address this gap in the literature through victims of urban violence in the relationship with PTSD. Further, insight provided by similarities of military combat and gang violence will be helpful. Chapter 3 includes a detailed account of the methodology chosen to collect the necessary data to test the hypotheses for this study.

Chapter 3: Research Method

Violence is pervasive and costly to society, and it can cause many to lose their lives or years of their lives due to trauma (Seal et al., 2014). There are four levels of influence to explain the risk factors that increase the probability of exposure to violence: (a) individual, (b) family, (c) peer and school, and (d) environmental factors (Seal et al., 2014). Violence also disproportionately affects young people of color (Davis, 2014); people of color are living in conditions that lead to violent actions in the community. Exposure to violence in terms of both direct victimization and secondary exposures such as witnessing violent acts puts youth at increased risk for adverse health and behavioral outcomes (Seal et al., 2014). PTSD has a relationship with the mental health issues that urban violence victims endure in their lifetime from the loss of family members due to violence.

The purpose of this quantitative correlational study was to examine whether a relationship exist among PTSD and victims of urban violence in Cook County, Illinois. The dominant PTSD-concepts of post-traumatic illness as a set of psychiatric symptoms that develop due to exposure to threatened or actual violence (Molendijk et al., 2016). This study brings attention to the violence occurring in urban communities and the development of PTSD from this violence. Chapter 3 includes (a) research questions and hypotheses; (b) research method and design; (c) appropriateness of design; (d) population and sample plan; (e) instrumentation; (f) data collection, analysis, and triangulation; and (g) ethical consideration of participants. Additionally, Chapter 3 contains rationale for selecting a correlational design to address the research questions and the procedures that took place to confirm or reject the null hypotheses. The overarching research question is,

What, if any correlation is there between self-reported PTSS and the amount of self-reported sense of community among residents from Cook County, Illinois? The following specific research questions were addressed:

Research Question 1: What, if any correlation exists between self-reported post-traumatic stress symptomatology and the amount of self-reported reinforcement of needs among residents from Cook County, Illinois?

$H_0$1: There is no correlation between post-traumatic stress symptomatology and self-reported reinforcement of needs among residents from Cook County, Illinois.

H_a1: There is correlation between post-traumatic stress symptomatology and reinforcement of needs among residents from Cook County, Illinois.

Research Question 2: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois?

$H_0$2: There is no correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

H_a2: There is correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

Research Question 3: What, if any correlation exists between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois?

$H_0$3: There is no correlation between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois.

H_a3: There is correlation between post-traumatic stress symptomatology and the amount of self-reported influence among residents from Cook County, Illinois.

Research Question 4: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois?

$H_0 4$: There is no correlation between post-traumatic stress symptomatology and the amount of self-reported shared emotional connection among residents from Cook County, Illinois.

$H_a 4$: There is correlation between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois.

Research Question 5: Which, if any combination of two or more self-reported sense of community scores (membership, influence, shared emotional connection, or reinforcement of needs) collectively better predicts post-traumatic stress symptomatology than any single measure of sense of community alone, among residents from Cook County, Illinois?

$H_0 5$: There is no correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

$H_a 5$: There is correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

Research Design and Rationale

I used a quantitative correlational study to examine whether a relationship exists among PTSD and victims of urban violence. A correlational design helps describe and measure the degree or association (or relationship) between two or more variables or sets of scores (Creswell & Creswell, 2017). Correlational studies take place in natural environments that do not include treatment and control groups. Unlike experimental designs, correlational studies do not describe causation; however, relationships among variables may occur concurrently. This design lines up with the post positivist worldview in which a researcher tests a theory by specifying narrow hypotheses and the collection of data to support or refute the hypotheses (Creswell & Creswell, 2017). Therefore, a correlational design was the most appropriate method for the study.

A self-administered Internet survey was used to examine the relationship between variables, test hypotheses, and answer research questions. The dependent variable includes traumatic incidents, military combat veterans (physical violence, Vietnam War, Operation Iraqi Freedom, and Operation Enduring Freedom), family solutions, treatments (therapies and medications), and effects of PTSD (behavioral, psychological, and depression). The independent variable is victims of urban violence, measured using a survey instrument designed to access the elements of membership, influence, reinforcement of needs, and shared emotional connection. This study has been approached from a neutral perspective to examine whether a correlation exists among the variables.

Population

The population of the study consisted of residents from Cook County, Illinois who are active members of the community. Cook County was selected for this study because it represents a section of a large metropolitan area where there have been victims of urban violence or a relative or close friend of a victim who also had access to the Internet to complete the online survey. A convenience sample of victims of urban violence who are active residents from Cook County, Illinois were eligible to participate in this study. Though there are 2.72 million possible victims of urban violence residents (any gender, over 18 years of age, and any ethnicity), the sample size for this study is 83.

Methodology

A correlational design was the most appropriate method for this study. Descriptive research provides an explanation of events, or helps define a set of attitudes, opinions, or behaviors that are observed or measured at a given time or environment (McNabb, 2015). The focus of descriptive research is on the mapping of the circumstance, situation, or set of events that describe what is happening or has happened (McNabb, 2015). Although a correlational design establishes cause-and-effect relationships, the researcher tries to manipulate certain variables to study the effects of such manipulation on the dependent variable(s) of interest (Sekaran & Bougie, 2016). In addition to correlational design, three qualitative methods of research were considered, including phenomenology, case study, and grounded theory. Qualitative methods are different from quantitative research in terms of strategies of inquiry, analysis, data collection methods, interpretations, and philosophical assumptions. For instance,

qualitative research uses data collection methods such as interview notes, transcripts of focus groups, answers to open-ended questions, and transcriptions of video recordings.

A phenomenological design was considered but was not selected because the purpose of this study did not include individuals' lived experiences of a phenomenon (Ravitch & Carl, 2016). A case study method involves studying a case (or multiple cases) of contemporary, real-life, events and is typically understood as bounded by time and place (Ravitch & Carl, 2016). The procedures used in this approach include a variety of data sources, direct observations, interviews, documents, artifacts, and other sources (Ravitch & Carl, 2016), which did not fit the purpose of this study. Finally, grounded theory was considered for this study but was not selected because the focus was not to develop a theory (Ravitch & Carl, 2016). The fundamental purpose of the grounded theory approach is a nonspecific way to refer to any approach in developing theoretical ideas (concepts, models, or formal theories) that begin with data (Ravitch & Carl, 2016). For this study, all participants were contacted through e-mail from Survey Monkey Audience with selection at random. This process is used through Survey Monkey where they recruit participants to take questionnaires and surveys. In final analysis, a correlational design was the most appropriate method to examine the relationship among victims of urban violence and PTSD.

Sample

The population of the study consisted of residents from Cook County, Illinois who are active members of the community. Cook County was selected for this study because it represents a section of a large metropolitan area (Chicago) where many residences have been a victim or are a relative or close friend of a victim of urban

violence. The sampling frame included the membership listings of a Survey Monkey Audience, feasibility consisting of 500 possible victims of urban violence participants by purchasing responses using this platform for survey responses.

The convenience sampling method is a nonprobability sampling that refers to the collection of information from members of the population who are conveniently available (Sekaran & Bougie, 2016). Nonprobability sampling includes two common weakness: (a) findings from the study of the sample cannot confidently generalized to the population and (b) inability to predict variability, which eliminates the ability to determine sampling precision (Sekaran & Bougie, 2016). A random or systematic sampling method was considered for the study, but there were about 752,496 members of the target population. Selecting a random sample of the target population would have limited the sample size. A random or systematic sample may enhance the generalization of the findings, but the selection of a convenience sampling method was more practical due to the population size. Although a nonprobability sample could weaken the validity of the study (Sekaran & Bougie, 2016), this method can result in an appropriate relationship of urban violence victims from a large metropolitan area in the United States.

The power calculations were performed using the National Computer Science School Power Analysis and Sample Size software. (Hintze, 2008). It is not known how strong the correlation between PTSS and sense of community (reinforcement of needs, membership, influence, or shared emotional connection) might be among residents from Cook County, Illinois. In the absence of any knowledge about the expected effect size, it seems logical that for a first study of its kind, an effect size somewhere in the middle of small and large, or a medium effect size, would be appropriate.

Data analysis was examined with hypotheses 1 through 4 and was tested using Pearson's correlation statistic. According to Cohen (1988), small, medium and large effect sizes for hypothesis tests about the Pearson correlation coefficient (r) are: r = 0.1, r = 0.3 and r = 0.5 respectively. A sample size of 83 produces 80% power with a two-sided alpha level of 0.05, to detect an effect size of 0.30, which is a medium effect size. For example, a correlation between self-reported PTSS and the amount of self-reported reinforcement of needs among residents from Cook County, Illinois is 0.30 or greater, there is an 80% chance of detecting (i.e., achieving statistical significance) a correlation at the 0.05 level of statistical significance. Based upon this power analysis, a sample size of 83 is considered adequate for the proposed study.

Ethical Protection of Research Participants

This study has been conducted in accordance with the establish procedures of Walden University's Institutional Review Board (IRB) to ensure ethical protection of research participants and researcher. According to Babbie (2017), researchers must be aware of problems that could occur when conducting research with human subjects: informed consent, potential harm, anonymity, confidentiality, and deception. The professional, economical, and physical risks to participants will be deemed minimal. This study is strictly voluntary, and I ensured the confidentiality and anonymity of all participants.

After the Institutional Review Board approval was granted (approval #09-04-18-0653838, two Internet surveys were e-mailed to participates from Cook County, Illinois via Survey Monkey. All 500 possible participants had the same chance of participating in the selected sample. The participants consisted of those who are victims of urban

violence and who agreed to participate, signed informed consent forms, and completed the surveys. Participants received an e-mail explaining the purpose of the study, how information would be used and secured, risks to participants, and time estimated to complete the surveys.

The Internet survey was e-mailed to participants as undisclosed recipients and personal information was not recorded in the research records to ensure privacy during the data collection process. The researcher was the only individual to have access to the research records, so confidentiality agreements will be necessary for this study. An electronic consent statement is incorporated in the text of the e-mail invitation and only those who agree to participate in the study did receive access to the survey questions. Participants received the researcher's contact information, and the results of the study were shared with participants upon request via an executive summary. There are no potential conflicts of interest in this study. Participants' responses are stored electronically in a password protected database for 5 years, and no paper copies are maintained.

Data Collection and Instrumentation

The study involved examining whether, and to what extent, a relationship exists among the independent variables (membership, reinforcement of needs, influence, and shared emotional connection) and the dependent variable (PTSS). Data collection consisted of a self-administered Internet survey that include demographic (see Appendix A), SCI-2 (see Appendix B), and IES-R (see Appendix C). This method of data collection is an economical and most time-efficient approach to survey victims of urban violence from Cook County, Illinois. Permission was granted to use both the SCI-2 (Ryan

Schooley) and IES-R (Dr. Daniel Weiss) instruments. The factors of the Internet survey included demographics (location, age), victims of urban violence (Sense of Community Index [SCI-2]), and PTSD (Impacts of Events Scale [IES-R]).

Demographic Factors

Demographic characteristics of the study sample was described using the mean, standard deviation, and range for continuous measurement scaled variables and frequency and percentage for categorical scared variables. Demographic items include such factors geographical location and age of the respondents.

Victims of Urban Violence

Victims of urban violence is measured using a validated instrument created by McMillan and Chavis (1986) that measures membership, reinforcement of needs, influence, and shared emotional connection. The 24 item SCI-2 were used to measure four components (membership, influence, shared emotional connection, and reinforcement of needs), which were categorized into four elements: membership (boundaries, emotional safety, belonging, personal investment, and common symbol system), influence (in group, group cohesion), shared emotional connection (definitive element in community, identification), and reinforcement of needs (rewarded community influence).

Validity and Reliability

Validity represents the accuracy of the instrument and whether one can draw meaningful and useful inferences from scores on particular instruments, whereas reliability represents whether items scores are internally consistent, whether item scores are stable overtime, and whether test administration and scoring were consistent (Sekaran

& Bougie, 2016). Validity in quantitative research refers to the accuracy and trustworthiness of instruments, data, and findings in research (Bernard, 2018, p. 41). In terms of this study being conducted, there are not any similar studies to produce external validity or meta-analyses that provided evidence that PTSD positively influences victims of urban violence. Correlational studies are often higher than experiments on external validity but lower on internal validity. Internal validity is relevant in research that try to establish a causal relationship, which does not apply for this study.

McMillan and Chavis (1986) noted that researchers have conducted many studies using the SCI-2; it has been used in numerous studies covering different cultures in North and South America, Asia, Middle East, as well as many contexts (e.g. urban, suburban, rural, tribal, workplaces, schools, universities, recreational clubs, and internet communities). According to McMillan and Chavis (1986), the initial sample-set evaluating a community using larger populations (i.e., > 1,800 people) produced reliable measure (coefficient alpha = 0.94) and a factor-scale ranging from .79 to .86. Several SCI-2 revisions have been performed since the initial conceptualization that generally produced high scale reliabilities beyond general standards for internal consistency.

Independent Variables

The independent variables consisted of the four elements of membership, influence, shared emotional connection, and reinforcement of needs for the sense of community. Membership is the component and scale for items 7-12, influence corresponds with items 13-18, shared emotional connection corresponds with items 19-24, and reinforcement of needs corresponds with items 1-6.

Membership. This score was measured on a continuous measurement scale with a range of 0-18. The score was computed in accordance with the instructions provided by the authors of the SCI-2 instrument. Smaller scores indicate a community member's self-report of less feeling of belonging or of sharing a sense of personal relatedness (i.e., less sense of community). Larger scores indicate a community member's self-report of more feeling of belonging or of sharing a sense of personal relatedness (i.e. more sense of community).

Influence. This score was measured on a continuous measurement scale with a range of 0-18. The score was computed in accordance with the scoring instructions provided by the authors of the SCI-2 instrument. Smaller scores indicate a community member's self-report of less feeling of a sense of mattering, of making a difference to the community and of the community mattering to its members (i.e., less sense of community). Larger scores indicate a community member's self-report of more feeling of a sense of mattering, of making a difference to the community and of the community mattering to its members (i.e., more sense of community).

Shared emotional connection. This score was measured on a continuous measurement scale with a range of 0-18. The score was computed in accordance with the scoring instructions provided by the authors of the SCI-2 instrument. Smaller scores indicate a community member's self-report of less commitment and belief that community members have shared and will share history, common places, time together, and similar experiences (i.e., less sense of community). Larger scores indicate a community member's self-report of more commitment and belief that community

members have shared and will share history, common places, time together, and similar experiences (i.e., less sense of community).

Reinforcement of needs. This score was measured on a continuous measurement scale with a range of 0-18. The score was computed in accordance with the scoring instructions provided by the authors of the SCI-2 instrument. Smaller scores indicate a community member's self-report of less feeling their needs will be met by the resources received through their membership in the community (i.e., less sense of community). Larger scores indicate a community member's self-report of more feeling their needs will be met by the resources received through their membership in the community (i.e., more sense of community).

Post-Traumatic Stress Symptomology

PTSS is operationalized using the IES-R questions to measure the overall PTSS of victims of urban violence. The IES-R is a validated 22-item instrument developed by Weiss & Marmar (1996) based upon the theoretical framework of the previous assessment. IES-R is a self-report measure that assesses subjective distress caused by traumatic events. Weiss & Marmar (1996) noted, this tool, not diagnostic for PTSD, is an appropriate instrument to measure the subjective response to a specific traumatic event in the senior population, especially in the response sets of intrusion (intrusive thoughts, nightmares, intrusive feelings and imagery, dissociative-like reexperiencing), avoidance (numbing of responsiveness, avoidance of feelings, situations, and ideas), and hyperarousal (anger, irritability, hypervigilance, difficulty concentrating, heightened startle), as well as a total subjective stress IES-R score. Table 1 depicts the characteristics, scales, and items.

The facets of IES-R that produce a PTSS score are as follows:

- Intrusion is the inability to keep memories of the event from returning.
- Avoidance is an attempt to avoid stimuli and triggers that may bring back memories.
- Hyperarousal is similar to jumpiness, it may include insomnia (trouble sleeping), a tendency to be easily startled, and a constant feeling that danger or disaster is nearby, an inability to concentrate, extreme irritability, or even violent behavior (Weiss & Marmar, 1996).

Table 1

Descriptive Statistics for Impact of Events Scale (IES-R)

Facets	Mean	SD	Cronbach's	No. of items
Intrusion	1.57	0.99	0.90	1, 2, 3, 6, 9, 14, 16, 20
Avoidance	1.44	0.90	0.86	5, 7, 8, 11, 12, 13, 17, 22
Hyperarousal	1.81	1.07	0.85	4, 10, 15, 18, 19, 21

Dependent variable. This score was measured on a continuous measurement scale with a range of 0-88. The score was computed in accordance with the scoring instructions provided by the authors of the IES-R instrument. Smaller scores indicate less symptomatology related to post-traumatic stress while larger scores indicate more

symptomatology of post-traumatic stress. Thus, higher scores indicate the trauma event could suppress the immune system, event after ten years of the event occurring.

Validity and reliability. Validity represents the accuracy of the instrument and whether one can draw meaningful and useful inferences from scores on particular instruments, whereas reliability represents whether items scored are internally consistent, whether item scores are stable overtime, and whether test administration and scoring were consistent (Sekaran & Bougie, 2016). Malinauskienė and Bernotaitė (2016) state the convergent validity was supported by positive correlations between the subscales (intrusion, avoidance, or hyperarousal). The IES-R was developed based upon assess the severity of post-traumatic stress syndrome. Item response theory analysis provides detailed information across a range of factors rather than a single reliability estimate of the entire sample that shows the validity of each item. There were several studies conducted to ensure the findings, which included a target population of 294 participants in a specific study from another country (Lithuania). The results of the study indicated that the IES-R is a valid and reliable instrument to assess different populations of PTSS severity.

Data Analysis

All statistical analyses were performed using SPSS v.24 for Windows. All of the inferential analyses are two-sided with a 5% alpha level. A two-sided alpha level is a two tailed test of 0.05 for level of significance but testing statistical significance both directions. This describe using .025 direction of the relationship hypotheses are testing for the possibility of the relationship in both directions. Demographic characteristics of the study sample are summarized using the mean, standard deviation and range for

continuous scaled variables and frequency and percent for categorical scaled variables. Cronbach's alpha was used to measure the internal consistency reliability of the sense of community and PTSS scale scores.

Hypotheses 1 through 4 has been tested using Pearson's correlation coefficient if the assumptions for Pearson's correlation statistic are satisfied. The first assumption is that there is a linear relationship between the independent (e.g., sense of community) and the dependent variable (e.g., PTSS). This assumption was evaluated by inspection of a scatter plot between the independent and dependent variables. If the scatter plot shows strong evidence that the linearity assumption is violated, then the non-parametric correlation statistic, Spearman's Rho will be used instead of Pearson's correlation statistic since the Spearman's Rho statistic is more robust against violations of the linearity assumption.

The second assumption for Pearson's correlation statistic to be valid is that there are no significant outliers. This assumption was evaluated by the same scatter plot as mentioned above. If no data points fall far outside the general pattern of the data points, the assumption of no outliers will not be considered satisfied. If there are extreme outliers, those data points were removed from the analysis.

The third assumption is that both the independent and dependent variables have a rough normal distribution. This assumption was evaluated by inspection of histograms of the independent and dependent variables. If the normality assumption is violated, Spearman's Rho was used instead of Pearson's correlation statistic since the Spearman's Rho statistic is more robust against violations of the normality assumption.

If the Pearson's correlation coefficient is statistically significantly, then different than zero, then the null hypothesis will be rejected, and it will be concluded there is a correlation between PTSS and the extent of sense of community among residents from Cook County, Illinois.

Hypothesis 5 was tested using step-wise multiple linear regression analysis if the assumptions for multiple linear regression are satisfied. The first assumption is that the independent variables collectively have a linear relationship with the dependent variable. This assumption was evaluated by inspecting a scatterplot of the studentized residuals versus the unstandardized predicted values. If the assumption is not satisfied, transformations of the independent and dependent variables (e.g., square root, or, inverse of the variable) will be tried in order to satisfy the linearity assumption. If transformations are ineffective, the multiple linear regression will be performed as originally planned and the violation of the linearity assumption will be reported as a potential limitation of the study.

The second assumption is that each independent variable is individually linearly related to the dependent variable. This assumption was evaluated by inspection of the same scatter plots discussed for hypotheses 1 – 4. If the assumption is not satisfied, transformations of the independent and dependent variables (e.g., square root, inverse of the variable) will be tried in order to satisfy the linearity assumption. If transformations are ineffective, the multiple linear regression will be performed as originally planned and the violation of the linearity assumption will be reported as a potential limitation of the study.

The third assumption is that there is homogeneity of variance (homoscedasticity). This means the variance in the dependent variable is approximately the same for all values of the independent variable. This assumption was evaluated by inspection of the same scatterplot used to evaluate the first assumption, the studentized residuals versus the unstandardized predicted values. If this assumption is not satisfied, the multiple linear regression will be performed as originally planned and the violation of the homogeneity of variance assumption will be reported as a potential limitation of the study.

The fourth assumption is that there is no multicollinearity. This means that two or more of the independent variables are not strongly correlated with each other. This assumption was evaluated by inspecting the variance inflation factors (VIF). If the VIF statistics are less than 10 for all of the independent variables, the constant variance assumption will be considered satisfied. Otherwise, one or more independent variables will be eliminated to avoid multi collinearity.

The fifth assumption is that there are no unusual data points, meaning, no significant outliers, high leverage points or influential data points. Evaluation of potential outliers was conducted by inspection of case-wise diagnostics and studentized deleted residuals. Evaluation of potential leverage points were conducted by inspection of leverage values. Evaluation of potential influential values were done by inspection of Cook's distance values. Any data points that were outliers, high leverage or influential values were deleted from the analysis.

The sixth assumption is that the error terms have a rough normal distribution. This assumption was evaluated by inspection of two different graphs: 1) a histogram of the Regression Standardized Residuals, and, 2) A normal P-P plot of the Expected

Cumulative Probability values versus the Observed Cumulative Probability values. If the normal distribution assumption is severely violated, then transformations of the independent and dependent variables was tried in attempt to remedy the problem. If transformations are ineffective, the multiple linear regression was performed without transformations and any violations of assumptions was reported as potential limitations of the study.

If the regression coefficient for two or more of the independent variables are statistically significant, the null hypothesis was not rejected, and it will be concluded that two, or more self-reported sense of community scores (reinforcement of needs, membership, influence, and shared emotional connection) collectively better predict self-reported PTSS than any single sense of community measure alone, among residents from Cook County, Illinois. If the null hypothesis was rejected, the model will be reported and interpreted.

Usefulness to the Field

The quantitative correlational study consisted of five research questions and hypotheses to examine the relationship among victims of urban violence and PTSD. A review of current literature in Chapter 2 reveal that studies on urban violence provided evidence that, support the relationship between PTSD and urban violence (Kohl et al., 2015; Smith & Patton, 2016; Nanney et al., 2018). Recent studies provided evidence that poor families experience high residential instability, yet by-and-large, residents of disadvantaged, high-crime neighborhoods stay put for extended periods of time before moving (Rosen, 2017). Although researchers have conducted studies on various backgrounds, there was research on the relationship between victims of urban violence

and PTSD. The review of the literature indicated that the lack of clarity exists in the field of research on the definitions, constructs, and measures of PTSD. Therefore, this gap in the literature was addressed in this study through an examination of the relationship between victims of urban violence and PTSD. The results of this study did the following: (a) recommend help for increased PTSD treatment for violent behavior, particular in urban city communities; (b) help create a positive impact for interventions on reducing violence in traumatized communities, resources for their delivery in the inner city are very limited or nonexistent; (c) enhance the understanding of the relationship of urban violence within communities and PTSD; (d) provide victims of urban violence with treatment, counseling, other medical resources available to help prevent traumatic stress.

Summary

Chapter 3 included the rationale for using quantitative correlational design to answer the research questions and hypotheses on the relationship between victims of urban violence and PTSD. This chapter included the research questions and hypotheses, research method and design, methodology, population, sample plan, instrumentation, data collection and analysis, and ethical consideration of participants. Additionally, Chapter 3 contained the rationale for selecting a correlational design to address the research questions and the procedures utilized to confirm or reject the null hypotheses. An Internet survey consisting of demographic, SCI-2, and IES-R items were used to survey participants. Descriptive, correlational, and regression analyses was performed using SPSS for Windows with a two-sided 5% alpha level to reject or support the null hypotheses. This chapter contained evidence to support the construct validity of the SCI-2 and IES-R.

Chapter 4 will include a comprehensive account of the data analyses, including whether a statistically significant correlation exists among victims of urban violence and PTSD. Chapter 5 will contain interpretation of findings, recommendations for action, implications for social change, limitations, areas for future research, and conclusions.

Chapter 4: Results

The purpose of this quantitative correlational study was to determine whether a relationship exists between victims of urban violence and PTSD. Urban violence victims experience trauma and may be diagnosed with PTSD injuries, creating a range of community needs. Membership, influence, shared emotional connection, and reinforcement of needs are the facets used to determine if a victim is in a violent community in this study. The research problem indicates a strong relationship between PTSD and victims of urban violence. However, the relationship between victims of urban violence and PTSD has not been investigated among urban violent communities. This chapter provides the results of this study, the data collection procedures, and data analysis techniques.

Data Collection

The population of the study consisted of residents from Cook County, Illinois, who are active members of the community. Cook County was selected for this study because it represents a section of a large metropolitan area (Chicago) where victims or relatives or close friends of a victim of urban violence reside. A total of 257 people responded to the study invitation and attempted to complete the survey. Among the 257 respondents, 216 (84.0%) agreed to informed consent. Among the 216 respondents who agreed to informed consent, 109 (50.5%) indicated they were a resident from Cook

County, Illinois. Among these 109 respondents, all 109 (100%) indicated they were 18 years of age or older. Among the same subgroup, 83 (76.1%) answered all SCI-2 and IES-R survey questions. Therefore, the final sample size for this study was $n = 83$. Appendix F shows descriptive statistics for responses to the survey instrument on the SCI-2. The next section will include the descriptive statistics for the responses to the individual survey questions concerning the IES-R questionnaire (see Appendix G).

Descriptive Statistics for the Independent and Dependent Variables

Table 2 shows descriptive statistics for the independent and dependent variables. The four measures of sense of community (an independent variables) were measured on a continuous measurement scale with a range of 0 to 18, where lower scores indicate *less sense of community* and larger scores indicate *more sense of community*. The measure of PTSS (a dependent variable) was measured on a scale of 0 to 88, where lower scores indicate *less PTSS* and while larger scores indicate *more PTSS.* The average sense of community scores ranged from 5.53 (membership) to 7.57 (shared emotional connection). Because all the sense of community scores were below the midpoint of 9.0, (0-18 scale) on average, the study participants had a relatively low level of sense of community. In addition, the average PTSS score was 20.5 in this study, which is less than the midpoint of 44, (0-88 scale) indicating the study participants had a relatively low level of PTSS on average.

Table 2

Descriptive Statistics for Independent and Dependent Variables

	N	Mean	*SD*	Minimum
Reinforcement of needs[a]	83	7.52	3.74	0.00
Membership[a]	83	5.53	3.85	0.00
Influence[a]	83	5.92	4.29	0.00
Shared emotional connection[a]	83	7.57	4.34	0.00
Post-traumatic stress symptomology[b]	83	20.52	17.20	0.00

Note. [a] Independent variables: SCI-2 scores.
[b] Dependent variable: PTSS (IES-R) scores.

Cronbach's Alpha for the Independent and Dependent Variables

Cronbach's alpha was calculated for the four sense of community scores (independent variables) and the PTSS score (dependent variable). Table 3 shows that reinforcement of needs, membership, influence, shared emotional connection, and PTSS all scores had an alpha of 0.85 or above, indicating very good reliability, which is the consistency of measure statistical analysis for the independent and dependent variables. The level of significance to show a positive correlation was 0.05, which shows evidence that a relationship exists between the independent and dependent variables. If there is a level of significance to show a negative correlation (less than 0.05), this is evidence that no relationship exists between the independent and dependent variables.

Table 3

Cronbach's Alpha Reliability for Independent and Dependent Variables

Variable	Cronbach's alpha (n = 83)	Number of questions
Reinforcement of needs[a]	0.88	6
Membership[a]	0.85	6
Influence[a]	0.90	6
Shared emotional connection[a]	0.89	6
Post-traumatic stress symptomology[b]	0.95	22

Note. [a] Independent variables: SCI-2 scores.

[b] Dependent variable: PTSS (IES-R) scores.

Hypothesis Test Results

Research Question 1

The overarching research question was What, if any correlation exists between self-reported post-traumatic stress symptomatology and the amount of self-reported reinforcement of needs among residents from Cook County, Illinois? To answer this question, the following hypotheses were formulated:

$H_0$1: There is no correlation between post-traumatic stress symptomatology and self-reported reinforcement of needs among residents from Cook County, Illinois.

H_a1: There is correlation between post-traumatic stress symptomatology and reinforcement of needs among residents from Cook County, Illinois.

The analysis for testing Hypothesis 1 was Pearson's correlation coefficient analysis. The assumptions for Pearson's correlation were evaluated prior to conducting the analysis. The first assumption was that there is a linear relationship between reinforcement of needs and PTSS. This assumption was evaluated by inspection of a

scatter plot diagram between the two variables. The second assumption was that no significant outliers would be observed in the same scatter plot for the first assumption. The third assumption was that both the independent and dependent variables would have a roughly normal distribution. This assumption was evaluated by inspection of histograms of the independent and dependent variables. Based upon these evaluations, the assumptions for Pearson's correlation were considered satisfied and the statistic was used to test Hypothesis 1, as originally planned.

Figure 3 shows no evidence of correlation between PTSS and reinforcement of needs. Further, the results of Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and reinforcement of needs $r(81) = -0.029$; $p = 0.79$. The null hypothesis ($H_0 1$) was not rejected, and it was concluded there is no correlation between the level of PTSS and self-reported reinforcement of needs among residents from Cook County, Illinois who are 18 years or older.

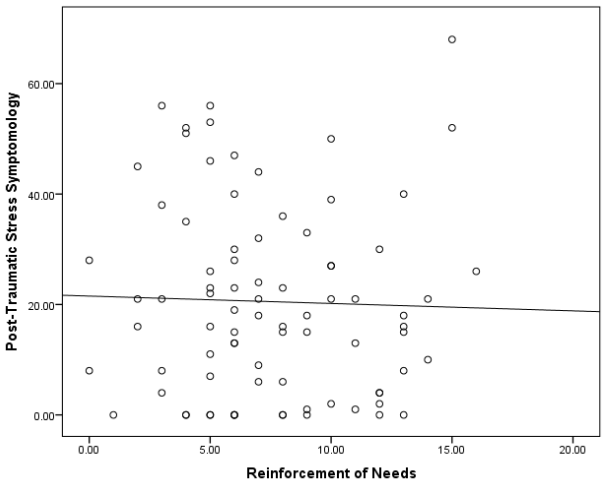

Figure 3. Scatter plot of post-traumatic stress symptomatology and reinforcement of needs sense of community among residents from Cook County, Illinois who are 18 or older. Pearson's Correlation: $r(81) = -0.029$; $p = 0.79$

Research Question 2

The second research question was as follows: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois? To answer this question, the following hypothesis was formulated:

$H_0$2: There is no correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

H_a2: There is correlation between post-traumatic stress symptomatology and self-reported membership among residents from Cook County, Illinois.

The planned analysis for testing Hypothesis 2 was also Pearson's correlation analysis. The assumptions for Pearson's correlation were evaluated as discussed above for Hypothesis 1. The assumptions for Pearson's correlation were considered satisfied and Pearson's correlation was used to test Hypothesis 2 as originally planned. Figure 4 is a scatter plot that graphically depicts the relationship between PTSS and membership. The figure shows no visible of a correlation between the two variables. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and membership $r(81) = -0.039$; $p = 0.73$. The null hypothesis was not rejected, and it was concluded there is no correlation between PTSS and self-reported membership among residents from Cook County, Illinois who are 18 years or older.

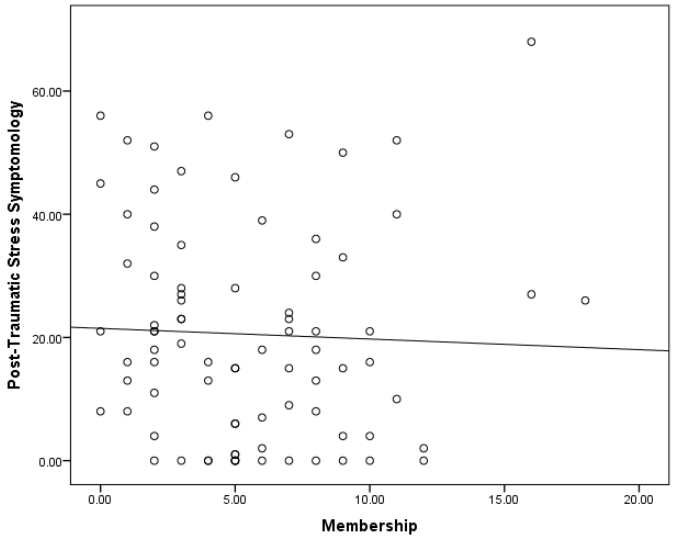

Figure 4. Scatter plot of post-traumatic stress symptomatology and membership sense of community among residents from Cook County, Illinois who are 18 or older. Pearson's correlation: $r(81) = -0.039$; $p = 0.73$

Research Question 3

The third research question was as follows: What, if any correlation exists between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois? To answer this question, the following hypothesis was formulated:

$H_0 3$: There is no correlation between post-traumatic stress symptomatology and self-reported influence among residents from Cook County, Illinois.

$H_a 3$: There is correlation between post-traumatic stress symptomatology and the amount of self-reported influence among residents from Cook County, Illinois.

The planned analysis for testing Hypothesis 3 was again Pearson's correlation analysis. The assumptions for Pearson's correlation were evaluated as discussed above for Hypotheses 1 and 2. The assumptions for Pearson's correlation were considered

satisfied and Pearson's correlation was used to test Hypothesis 3 as originally planned. Figure 5 is a scatter plot that graphically depicts the relationship between PTSS and influence. The figure shows no evidence of a correlation between the two variables. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and influence $r(81) = -0.044$; $p = 0.69$. The null hypothesis was not rejected, and it was concluded there is no correlation between the PTSS and self-reported influence among residents from Cook County, Illinois who are 18 years or older.

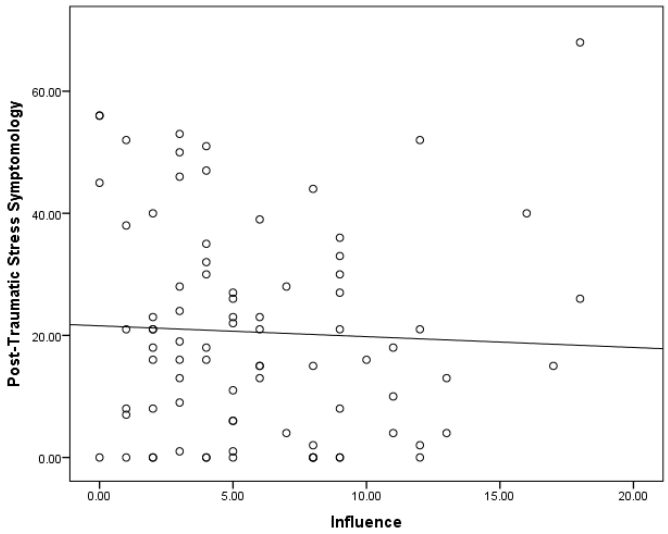

Figure 5. Scatter plot of post-traumatic stress symptomatology and influence sense of community among residents from Cook County, Illinois who are 18 or older. Pearson's correlation: $r(81) = -0.044$; $p = 0.69$

Research Question 4

The fourth research question was as follows: What, if any, correlation exists between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois?

$H_0$4: There is no correlation between post-traumatic stress symptomatology and the amount of self-reported shared emotional connection among residents from Cook County, Illinois.

H_a4: There is correlation between post-traumatic stress symptomatology and self-reported shared emotional connection among residents from Cook County, Illinois.

The planned analysis for testing Hypothesis 4 was Pearson's correlation analysis. The assumptions for Pearson's correlation were evaluated as discussed above for Hypotheses 1-3. The assumptions for Pearson's correlation were considered satisfied and Pearson's correlation was used to test Hypothesis 4 as originally planned. Figure 6 is a scatter plot that graphically depicts the relationship between PTSS and shared emotional connection. The figure shows no evidence of a correlation between the two variables. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and shared emotional connection $r(81) = -0.033$; $p = 0.77$. The null hypothesis was not rejected, and it was concluded there is no correlation between the level of PTSS and self-reported shared emotional connection among residents from Cook County, Illinois who are 18 years or older.

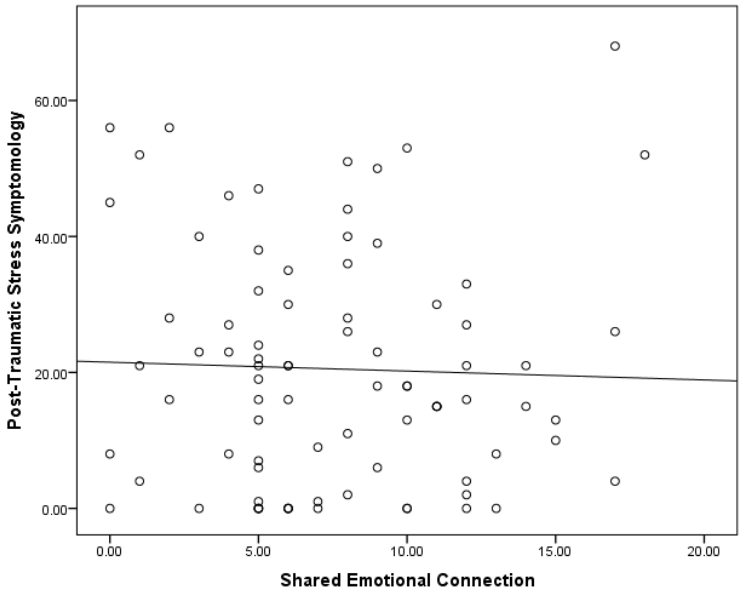

Figure 6. Scatter plot of post-traumatic stress symptomatology and shared emotional connection sense of community among residents from Cook County, Illinois who are 18 or older. Pearson's correlation: $r(81) = -0.033$; $p = 0.77$

Research Question 5

The fifth research question was as follows: Which, if any combination of two or more self-reported sense of community scores (membership, influence, shared emotional connection, or reinforcement of needs) collectively better predicts post-traumatic stress symptomatology than any single measure of sense of community alone, among residents from Cook County, Illinois? To answer this question, the following hypothesis was formulated:

$H_0$5: There is no correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

H_a5: There is correlation between post-traumatic stress symptomatology or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

The planned analysis for testing Hypothesis 5 was step-wise multiple linear regression analysis. The first step in the step-wise multiple linear regression procedure, even before testing the assumptions, is to determine if any of the candidate independent variables (i.e., the four sense of community measures) are individually statistically significantly correlated ($p < 0.05$) with the dependent variable (PTSS). If none of the independent variables are statistically significantly correlated with the dependent variable, the step-wise multiple linear regression procedure terminates and there is no model to report. As was shown by the results of testing Hypotheses 1-4, none of the sense of community independent variables were statistically significantly correlated with the dependent variable, PTSS. Therefore, the step-wise multiple linear regression analysis failed to produce a model. Specifically, the null hypotheses were not rejected, and it was concluded that two, or more self-reported sense of community scores (reinforcement of needs, membership, influence, or shared emotional connection) collectively do not better predict self-reported PTSS than any single sense of community measure alone, among residents from Cook County, Illinois.

Summary

This study did not show statistically significant evidence that sense of community is correlated with PTSS. There are several plausible explanations for these findings. The results of this study, which were based upon a sample of n = 83 members of the population of interest (i.e. residents from Cook County, Illinois who are 18 years of age

or older), are an accurate reflection of the population, and there is no correlation between sense of community and level of PTSS. It is possible that there is a correlation between sense of community and PTSS, but the sample used for this study (Survey Monkey Audience) was not the best representative of the population of interest to conclude accurate findings. There is a correlation between sense of community and PTSS in the population of interest, and the study sample was a fair representation of the entire population of interest, but the correlation is so weak that a test of n = 83 was not large enough to detect it. Further study is recommended using the same instrumentation but either a different source of study participants, a larger sample size, or both.

Chapter 5 includes an interpretation of the research findings, recommendations for urban violence victims, implications for social change, suggestions for future research, recommendations for actions, and limitations of this research. Chapter 5 also includes a discussion on how the findings from the current study align or diverge from findings of prior research studies in the literature review and ideas for future research.

Chapter 5: Summary, Conclusion, and Recommendations

Overview

The purpose of this quantitative correlational study was determining whether relationships exist between victims of urban violence and PTSD. As victims of urban violence face continuous changes in their communities, PTSD will be necessary to measure the violence in urban communities. Violence is one of the predominant traumas affecting minorities and their communities (Smith & Patton, 2016). Although researchers have conducted studies on urban communities (Kohl et al., 2015; Smith & Patton, 2016; Nanney et al., 2018), minimal research exists on the relationship between victims of urban violence and PTSD.

Chapter 5 contains a summary, recommendations, and conclusions of the research study, which includes (a) interpretation of significant findings, (b) limitations, (c) recommendations for future research, (d) implications for urban violence victims and social change, and (e) conclusion.

Interpretation of Findings

Participants of the study included victims of urban violence (n = 83) from Cook County, Illinois (Chicago, Illinois). A total of 257 possible victims of urban violence responded to the study invitation and attempted to complete the survey. Among the 257 respondents, 216 (84.0%) agreed to informed consent. Among the 216 respondents that agreed to informed consent, 109 (50.5%) indicated they were a resident from Cook County, Illinois. Among the 109 respondents who consented to the study and were residents from Cook County, Illinois and were 18 years of age or older, 83 (76.1%) answered all SCI-2 and IES-R survey questions.

Descriptive statistics for the independent (victims of urban violence) and dependent (PTSD) variables were performed. The measure of PTSS (dependent variable) was measured on a scale of 0 to 88, where lower scores indicated less PTSS while larger scores indicate more PTSS. In addition, the average PTSS score was 20.5, which is less than the midpoint of 44, indicating the study participants had a relatively low level of PTSS on average. The four measures of sense of community (independent variables) were measured on a continuous measurement scale with a range of 0 to 18, where lower scores indicated less sense of community whereas larger scores indicated more sense of community. The average sense of community scores ranged from 5.53 (membership) to 7.57 (shared emotional connection), with influence at 5.92 and reinforcement of needs at 7.52. Considering all of the sense of community scores were below the midpoint of 9.0, on average, the study participants had a relatively low level of sense of community.

Cronbach alpha analysis was performed to test hypotheses and the research questions. All statistical analyses were performed using SPSS for Windows with a two-sided 5% alpha level. All scores had an alpha above 0.85, indicating very good reliability. This section provides an interpretation of the findings presented in Chapter 4.

Research Question 1

Research Question 1 addressed whether a statistically significant relationship existed between PTSS and reinforcement of needs. Null Hypothesis 1, which is that no correlation between self-reported PTSS and the amount of self-reported reinforcement of needs among residents from Cook County, Illinois, was determined by using Pearson's correlation analysis. The results of the Pearson's correlation analysis showed that there was not a statistically significant correlation between PTSS and reinforcement of needs

r(81) = -0.029; p = 0.79. The null hypothesis was not rejected, and it was concluded there is no correlation between PTSS and self-reported reinforcement of needs among residents from Cook County, Illinois who are 18 years or older.

Research Question 2

Research Question 2 addressed whether a statistically significant relationship existed between PTSS and membership. Null Hypothesis 2, which is that no correlation between self-reported PTSS and the amount of self-reported membership among residents from Cook County, Illinois, was determined by using Pearson's correlation analysis. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and membership r(81) = -0.039; p = 0.73. The null hypothesis was not rejected, and it was concluded there is no correlation between PTSS and self-reported membership among residents from Cook County, Illinois who are 18 years or older.

Research Question 3

Research Question 3 addressed whether a statistically significant relationship existed between PTSS and influence. Null Hypothesis 3, which is that no correlation between self-reported PTSS and the amount of self-reported influence among residents of Cook County, Illinois, was determined by using Pearson's correlation analysis. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and influence r(81) = -0.044; p = 0.69. The null hypothesis was not rejected, and it was concluded there is no correlation between PTSS and self-reported influence among residents from Cook County, Illinois who are 18 years or older.

Research Question 4

Research Question 4 addressed whether a statistically significant relationship existed between PTSS and shared emotional connection. Null Hypothesis 4, which is that no correlation between self-reported PTSS and the amount of self-reported shared emotional connection among residents from Cook County, Illinois, was determined by using Pearson's correlation analysis. The results of the Pearson's correlation analysis showed there was not a statistically significant correlation between PTSS and shared emotional connection $r(81) = -0.033$; $p = 0.77$. The null hypothesis was not rejected, and it was concluded there is no correlation between PTSS and self-reported shared emotional connection among residents from Cook County, Illinois who are 18 years or older.

Research Question 5

Research Question 5 addressed whether a statistically significant relationship existed between PTSS and any combination of membership, influence, shared emotional connection, and reinforcement of needs. Null Hypothesis 5, which is that there is no correlation between PTSS or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois, was evaluated using a step-wise multiple linear regression analysis. The first step in the step-wise multiple linear regression procedure, even before testing the assumptions, was to determine if any of the candidate independent variables (i.e., the four sense of community measures) are individually statistically significantly correlated ($p < 0.05$) with the dependent variable (PTSS). If none of the independent variables are statistically significantly correlated with the dependent variable, the step-wise multiple linear regression procedure terminates and there is no model to report. As was shown by

the results of testing Hypotheses 1-4, none of the sense of community independent variables were statistically significantly correlated with the dependent variable, PTSS. Therefore, the step-wise multiple linear regression analysis failed to produce a model. The null hypothesis was not rejected, and it was concluded that no correlation between PTSS or any combinations of membership, influence, shared emotional connection, or reinforcement of needs among residents from Cook County, Illinois.

Limitations of Study

For the study to make a significant contribution to understanding the relationship between victims of urban violence and PTSD, it was essential to recognize possible limitations. Although the study provided information useful to victims of urban violence, it has several limitations that could be addressed by changing or modifying the research design. The use of a correlational design was one limitation of the study. Although no relationship was found between the independent and dependent variables, causation was not determined. A second limitation of the study was the use of a self-reported survey instrument, which increased the risk of participants not answering all the questions in an accurate manner and did not allow probing questions to gain additional information about urban violence victim's perceptions of how life is living in their neighborhood communities.

A third limitation was the use of a convenience sampling method, in which participants were selected from a geographical location. Although sampling methods are intended to maximize efficiency and validity (Palinkas, et al., 2015), the use of this method might not have provided an appropriate cross-section of victims of urban violence from Cook County, Illinois using the four facets of sense of community,

membership, shared emotional connection, reinforcement of needs, and influence ranged between 5.53 to 7.57 from a scale of 0-18.

Recommendations for Future Research

The current study contributes to the body of knowledge on victims of urban violence and PTSD; however, the limitations of the study affected the generalization of the findings. Therefore, future researchers might consider several issues in subsequent research endeavors. First, further consideration might be given to replicating the study using a different geographical location but expanding the target population (n = 83) beyond the geographical location (Cook County, Illinois) selected for this study. Such a study might increase the response rate and yield data that would improve generalization to a broader community of victims living in urban violent location overall. Another consideration might be to replicate the study using a different geographical location consisting of more individuals living in violent cities such as Baltimore, Maryland or St. Louis, Missouri.

In the current study, demographic characteristics were described using descriptive statistics. For instance, the sample consisted of 76.1% of individuals 18 years or older, which might provide an opportunity for future researchers to determine if findings are similar across demographic variables such as race and gender. A researcher might also consider using smaller cities other than Cook County, Illinois, where there is a high-rate of violence occurring and smaller populations of people in neighborhood communities with a population less than one million people.

Another limitation of this study was the use of a correlational study design. Correlational study designs do not provide strong evidence of cause and effect

relationships. The strongest study design for showing cause and effect is a randomized controlled experimental study design (Creswell & Creswell, 2017). One could conceive of randomizing victims of urban violence to a control group. This group receives counseling or medical care to provide the appropriate measures to show the effects of PTSD and be evaluated with the proper professionals. However, such a study likely not be feasible because it is considered unethical to force victims of urban violence to counseling and medical care. Caring for and supporting victims of violence through evidence-based initiatives is crucial in protecting health and breaking cycles of violence.

Recommendations to Victims of Urban Violence

As previously discussed, violence is one of the predominant traumatic events affecting the lives of minorities and their communities (Smith & Patton, 2016). Limited research exists on victims of urban violence in the United States to support how violence affects individuals mentally and physically. Exposure to violence in terms of both direct victimization and secondary exposures, such as witnessing violent acts, increases a victim's likelihood of adverse health and behavioral outcomes (Seal, Nguyen & Beyer, 2014). Community violence has been defined as the exposure to violence and violence-related events occurring in or around the home, school, or neighborhood, and may involve physical as well as threatened harm (Kohl, Gross, Harrison, & Richards, 2015). Parker and Stansfield (2015) described the urban violence components as:

(1) High population turnover and increasing population heterogeneity accompany the immigration process, resulting in a lower sense of collective efficacy and a lack of social control through weakened community supervision.

(2) Local economic deprivation may be driven by the intergenerational persistence of low incomes and poor educational outcomes.

(3) The number of high-risk offenders grows (Hispanic immigrants are on average younger and more likely to be male than the general population.

(4) The structure of the labor market changes and competition for jobs increases.

Further research is necessary to determine if the relationship among victims of urban violence and PTSD exists in urban violence communities throughout the United States. Another research area may include examining the traumatic effects of urban violence on parents when losing a child. Finally, an investigation may include examining how urban violence and traumatic events influence medical programs for people involved in traumatic violent events.

Implications for Urban Violence Victims and Social Change

The results of the study could be useful to victims of urban violence and urban communities in making decisions regarding a wide range of society change. New development practices to help decrease violence and poverty in these communities by creating programs with a treatment plan that involves the family and community. According to the findings of this study, it did not show statistically significant evidence that sense of community is correlated with PTSS.

The significance and social change implication are that victims of urban violence could use the results of this study to expand the understanding of the condition of PTSD. This addresses the realities of living in a lower-income geographical location. Consequently, economically disadvantaged people growing up in urban contexts are at a greater risk for traumatic exposure, violent injury, and premature death than middleclass

individuals growing up in suburban areas (Smith & Patton, 2016). Community violence has been defined as the exposure to violence and violence-related events occurring in or around the home, school, or neighborhood, and may involve physical as well as threatened harm (Kohl, Gross, Harrison, & Richards, 2015). Therefore, urban violence may affect the overall livelihood of any individual living in these conditions but creating new avenues of policies may help reduce violent trends in the future research on victims of urban violence.

Conclusion

This study met the purpose of the research and provided practical information for victims of urban violence and PTSD. The general problem in urban violence, is that victims experience trauma and potential risk of PTSD injuries, which indicates that there is no correlation of community needs. These needs are to address the membership, influence, shared emotional connection, and reinforcement of needs a violent community. The research problem is that the violence happening to urban victims may have the same effect of combat-related traumatic events military personnel encounter when in combat areas; however, these relationships have not been investigated among victims of urban violence. The purpose of the quantitative correlational study was to assess the relationship among victims of urban violence and PTSD. The research questions were designed to answer whether, and to what extent, correlations exist among sense of community facets membership, influence, shared emotional connection, reinforcement of needs, and PTSD. Among urban violence victims, PTSD did not have a statistically significant relationship with all four facets of the SCI-2.

PTSD consisted of intrusion, avoidance, and hyper arousal. Considering the smallest possible score for the IES-R score was 0.00 and the maximum possible score was 88, the IES-R score was 20.5, which is less than the midpoint of 44, indicating the study participants had a relatively low-level of PTSS on average. Considering the smallest possible score for the sense of community (SCI-2) 0.00 and the maximum possible score was 18, all four facets scores were rated between 5.53 and 7.57. Among the four facets of community, shared emotional connection was the highest on average, and the membership was the lowest on average. This study has also helped to develop strategies that can fill the gaps in research on aiding victims of urban violence. The significance is that victims of urban violence could not use the results of this study to expand mental development programs that leverage counseling needs and post-traumatic stress to address violence in urban communities.

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Appendix A: Demographic Questions

INSTRUCTIONS

The demographic information provided by research participants is a very important part of the questionnaire. Sometimes demographic data can help to illuminate study findings and results.

PLEASE REMEMBER responses to the questions below are strictly on a voluntary basis AND as a reminder, ALL information provided is anonymous.

1. How many years have you resided in Cook County, Illinois?

- Less than one year
- 2 – 5 years
- 6 – 10 years
- 10 years or more

2. Which area of Cook County, Illinois do you reside?

3. What is your gender?

- Female
- Male

4. Which category below represents your age?

- 18-29
- 30-39
- 40-49
- 50-59
- 60 or older

Appendix B: Sense of Community Index (SCI-2)

SENSE OF COMMUNITY INDEX II

The following questions about community refer to:_____

How important is it to you to feel a sense of community with other community members?

1	2	3	4	5	6
Prefer Not to be Part of This Community	Not Important at All	Not Very Important	Somewhat Important	Important	Very Important

How well do each of the following statements represent how you *feel* about this community?

		Not at All	Somewhat	Mostly	Completely
1.	I get important needs of mine met because I am part of this community.	O	O	O	O
2.	Community members and I value the same things.	O	O	O	O
3.	This community has been successful in getting the needs of its members met.	O	O	O	O
4.	Being a member of this community makes me feel good.	O	O	O	O
5.	When I have a problem, I can talk about it with members of this community.	O	O	O	O
6.	People in this community have similar needs, priorities, and goals.	O	O	O	O
7.	I can trust people in this community.	O	O	O	O

		Not at All	Somewhat	Mostly	Completely
8.	I can recognize most of the members of this community.	O	O	O	O
9.	Most community members know me.	O	O	O	O
10.	This community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize.	O	O	O	O
11.	I put a lot of time and effort into being part of this community.	O	O	O	O
12.	Being a member of this community is a part of my identity.	O	O	O	O
13.	Fitting into this community is important to me.	O	O	O	O
14.	This community can influence other communities.	O	O	O	O
15.	I care about what other community members think of me.	O	O	O	O
16.	I have influence over what this community is like.	O	O	O	O
17.	If there is a problem in this community, members can get it solved.	O	O	O	O
18.	This community has good leaders.	O	O	O	O
19.	It is very important to me to be a part of this community.	O	O	O	O
20.	I am with other community members a lot and enjoy being with them.	O	O	O	O
21.	I expect to be a part of this community for a long time.	O	O	O	O
22.	Members of this community have shared important events together, such as holidays, celebrations, or disasters.	O	O	O	O
23.	I feel hopeful about the future of this community.	O	O	O	O
24.	Members of this community care about each other.	O	O	O	O

Appendix C: Impact of Events Scale (IES-R)

IMPACT OF EVENTS SCALE-Revised (IES-R)

INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to _____ i.e. kidnapping, gang-related shooting, domestic violence, sexual assault, etc. (event) that occurred on August 2017 through August 2018 (date). How much have you been distressed or bothered by these difficulties?

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Any reminder brought back feelings about it	0	1	2	3	4
2. I had trouble staying asleep	0	1	2	3	4
3. Other things kept making me think about it.	0	1	2	3	4
4. I felt irritable and angry	0	1	2	3	4
5. I avoided letting myself get upset when I thought about it or was reminded of it	0	1	2	3	4
6. I thought about it when I didn't mean to	0	1	2	3	4
7. I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8. I stayed away from reminders of it.	0	1	2	3	4
9. Pictures about it popped into my mind.	0	1	2	3	4
10. I was jumpy and easily startled.	0	1	2	3	4
11. I tried not to think about it.	0	1	2	3	4
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13. My feelings about it were kind of numb.	0	1	2	3	4
14. I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15. I had trouble falling asleep.	0	1	2	3	4
16. I had waves of strong feelings about it.	0	1	2	3	4
17. I tried to remove it from my memory.	0	1	2	3	4
18. I had trouble concentrating.	0	1	2	3	4
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20. I had dreams about it.	0	1	2	3	4
21. I felt watchful and on-guard.	0	1	2	3	4
22. I tried not to talk about it.	0	1	2	3	4

Total IES-R Score:_____

INT: 1, 2, 3, 6, 9, 14, 16, 20
AVD: 5, 7, 8, 11, 12, 13, 17, 22
HYP: 4, 10, 15, 18, 19, 21

Appendix D: Descriptive Statistics for all Sense of Community (SCI-2) Survey Questions

How important is it to you to feel a sense of community with other community members?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Prefer Not to be a Part of This Community	1	1.2	1.2	1.2
	Not Important at All	3	3.6	3.6	4.8
	Not Very Important	12	14.5	14.5	19.3
	Somewhat Important	26	31.3	31.3	50.6
	Important	28	33.7	33.7	84.3
	Very Important	13	15.7	15.7	100.0
	Total	83	100.0	100.0	

I get important needs of mine met because I am part of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	20	24.1	24.1	24.1
	Somewhat	36	43.4	43.4	67.5
	Mostly	25	30.1	30.1	97.6
	Completly	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

Community members and I value the same things.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	5	6.0	6.0	6.0
	Somewhat	47	56.6	56.6	62.7
	Mostly	31	37.3	37.3	100.0
	Total	83	100.0	100.0	

This community has been successful in getting the needs of its members met.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	11	13.3	13.3	13.3
	Somewhat	44	53.0	53.0	66.3
	Mostly	26	31.3	31.3	97.6
	Completly	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

Being a member of this community makes me feel good.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	12	14.5	14.5	14.5
	Somewhat	28	33.7	33.7	48.2
	Mostly	31	37.3	37.3	85.5
	Completly	12	14.5	14.5	100.0
	Total	83	100.0	100.0	

When I have a problem, I can talk about it with members of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	24	28.9	28.9	28.9
	Somewhat	39	47.0	47.0	75.9
	Mostly	15	18.1	18.1	94.0
	Completly	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

People in this community have similar needs, priorities, and goals.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	11	13.3	13.3	13.3
	Somewhat	40	48.2	48.2	61.4
	Mostly	25	30.1	30.1	91.6
	Completly	7	8.4	8.4	100.0
	Total	83	100.0	100.0	

I can trust people in this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	11	13.3	13.3	13.3
	Somewhat	41	49.4	49.4	62.7
	Mostly	26	31.3	31.3	94.0
	Completly	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

I can recognize most of the members of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	35	42.2	42.2	42.2
	Somewhat	30	36.1	36.1	78.3
	Mostly	15	18.1	18.1	96.4
	Completly	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

Most community members know me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	39	47.0	47.0	47.0
	Somewhat	27	32.5	32.5	79.5
	Mostly	13	15.7	15.7	95.2
	Completly	4	4.8	4.8	100.0
	Total	83	100.0	100.0	

This community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	36	43.4	43.4	43.4
	Somewhat	33	39.8	39.8	83.1
	Mostly	7	8.4	8.4	91.6
	Completly	7	8.4	8.4	100.0
	Total	83	100.0	100.0	

I put a lot of time and effort into being part of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	29	34.9	34.9	34.9
	Somewhat	36	43.4	43.4	78.3
	Mostly	16	19.3	19.3	97.6
	Completly	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

Being a member of this community is a part of my identity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	29	34.9	34.9	34.9
	Somewhat	38	45.8	45.8	80.7
	Mostly	11	13.3	13.3	94.0
	Completly	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

Fitting into this community is important to me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	22	26.5	26.5	26.5
	Somewhat	34	41.0	41.0	67.5
	Mostly	19	22.9	22.9	90.4
	Completly	8	9.6	9.6	100.0
	Total	83	100.0	100.0	

This community can influence other communities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	22	26.5	26.5	26.5
	Somewhat	38	45.8	45.8	72.3
	Mostly	14	16.9	16.9	89.2
	Completly	9	10.8	10.8	100.0
	Total	83	100.0	100.0	

I care about what other community members think of me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	31	37.3	37.3	37.3
	Somewhat	32	38.6	38.6	75.9
	Mostly	13	15.7	15.7	91.6
	Completly	7	8.4	8.4	100.0
	Total	83	100.0	100.0	

I have influence over what this community is like.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	54	65.1	65.1	65.1
	Somewhat	20	24.1	24.1	89.2
	Mostly	6	7.2	7.2	96.4
	Completly	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

If there is a problem in this community, members can get it solved.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	20	24.1	24.1	24.1
	Somewhat	40	48.2	48.2	72.3
	Mostly	20	24.1	24.1	96.4
	Completly	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

This community has good leaders.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	24	28.9	28.9	28.9
	Somewhat	30	36.1	36.1	65.1
	Mostly	24	28.9	28.9	94.0
	Completly	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

It is very important to me to be a part of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	17	20.5	20.5	20.5
	Somewhat	32	38.6	38.6	59.0
	Mostly	26	31.3	31.3	90.4
	Completly	8	9.6	9.6	100.0
	Total	83	100.0	100.0	

I am with other community members a lot and enjoy being with them.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	30	36.1	36.1	36.1
	Somewhat	39	47.0	47.0	83.1
	Mostly	11	13.3	13.3	96.4
	Completly	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

I expect to be a part of this community for a long time.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	15	18.1	18.1	18.1
	Somewhat	23	27.7	27.7	45.8
	Mostly	27	32.5	32.5	78.3
	Completly	18	21.7	21.7	100.0
	Total	83	100.0	100.0	

Members of this community have shared important events together, such as holidays, celebrations, or disasters.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	22	26.5	26.5	26.5
	Somewhat	38	45.8	45.8	72.3
	Mostly	16	19.3	19.3	91.6
	Completly	7	8.4	8.4	100.0
	Total	83	100.0	100.0	

I feel hopeful about the future of this community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	15	18.1	18.1	18.1
	Somewhat	28	33.7	33.7	51.8
	Mostly	27	32.5	32.5	84.3
	Completly	13	15.7	15.7	100.0
	Total	83	100.0	100.0	

Members of this community care about each other.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	13	15.7	15.7	15.7
	Somewhat	39	47.0	47.0	62.7
	Mostly	25	30.1	30.1	92.8
	Completly	6	7.2	7.2	100.0
	Total	83	100.0	100.0	

Appendix E: Descriptive Statistics for all Post-Traumatic Stress Symptomology (IES-R) Survey Questions

Any reminder brought back feelings about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	28	33.7	33.7	33.7
	A little bit	24	28.9	28.9	62.7
	Moderately	14	16.9	16.9	79.5
	Quite a bit	15	18.1	18.1	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

I had trouble staying asleep.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	53	63.9	63.9	63.9
	A little bit	17	20.5	20.5	84.3
	Moderately	7	8.4	8.4	92.8
	Quite a bit	4	4.8	4.8	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

Other things kept making me think about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	33	39.8	39.8	39.8
	A little bit	24	28.9	28.9	68.7
	Moderately	20	24.1	24.1	92.8
	Quite a bit	6	7.2	7.2	100.0
	Total	83	100.0	100.0	

I felt irritable and angry.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	33	39.8	39.8	39.8
	A little bit	30	36.1	36.1	75.9
	Moderately	9	10.8	10.8	86.7
	Quite a bit	6	7.2	7.2	94.0
	Extremely	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

I avoided letting myself get upset when I thought about it or was reminded of it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	29	34.9	34.9	34.9
	A little bit	22	26.5	26.5	61.4
	Moderately	18	21.7	21.7	83.1
	Quite a bit	12	14.5	14.5	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

I thought about it when I didn't mean to.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	37	44.6	44.6	44.6
	A little bit	31	37.3	37.3	81.9
	Moderately	9	10.8	10.8	92.8
	Quite a bit	5	6.0	6.0	98.8
	Extremely	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

I felt as if it hadn't happened or wasn't real.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	51	61.4	61.4	61.4
	A little bit	14	16.9	16.9	78.3
	Moderately	13	15.7	15.7	94.0
	Quite a bit	3	3.6	3.6	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

I stayed away from reminders of it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	36	43.4	43.4	43.4
	A little bit	17	20.5	20.5	63.9
	Moderately	16	19.3	19.3	83.1
	Quite a bit	10	12.0	12.0	95.2
	Extremely	4	4.8	4.8	100.0
	Total	83	100.0	100.0	

Pictures about it popped into my mind.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	33	39.8	39.8	39.8
	A little bit	29	34.9	34.9	74.7
	Moderately	16	19.3	19.3	94.0
	Quite a bit	4	4.8	4.8	98.8
	Extremely	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

I was jumpy and easily startled.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	54	65.1	65.1	65.1
	A little bit	11	13.3	13.3	78.3
	Moderately	11	13.3	13.3	91.6
	Quite a bit	6	7.2	7.2	98.8
	Extremely	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

I tried not to think about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	29	34.9	34.9	34.9
	A little bit	19	22.9	22.9	57.8
	Moderately	14	16.9	16.9	74.7
	Quite a bit	14	16.9	16.9	91.6
	Extremely	7	8.4	8.4	100.0
	Total	83	100.0	100.0	

I was aware that I still had a lot of feelings about it, but I didn't deal with them.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	44	53.0	53.0	53.0
	A little bit	13	15.7	15.7	68.7
	Moderately	15	18.1	18.1	86.7
	Quite a bit	8	9.6	9.6	96.4
	Extremely	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

My feelings about it were kind of numb.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	36	43.4	43.4	43.4
	A little bit	19	22.9	22.9	66.3
	Moderately	21	25.3	25.3	91.6
	Quite a bit	5	6.0	6.0	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

I found myself acting or feeling like I was back at that time.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	55	66.3	66.3	66.3
	A little bit	18	21.7	21.7	88.0
	Moderately	4	4.8	4.8	92.8
	Quite a bit	5	6.0	6.0	98.8
	Extremely	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

I had trouble falling asleep.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	48	57.8	57.8	57.8
	A little bit	19	22.9	22.9	80.7
	Moderately	6	7.2	7.2	88.0
	Quite a bit	9	10.8	10.8	98.8
	Extremely	1	1.2	1.2	100.0
	Total	83	100.0	100.0	

I had waves of strong feelings about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	30	36.1	36.1	36.1
	A little bit	25	30.1	30.1	66.3
	Moderately	16	19.3	19.3	85.5
	Quite a bit	10	12.0	12.0	97.6
	Extremely	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

I tried to remove it from my memory.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	34	41.0	41.0	41.0
	A little bit	21	25.3	25.3	66.3
	Moderately	10	12.0	12.0	78.3
	Quite a bit	13	15.7	15.7	94.0
	Extremely	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

I had trouble concentrating.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	40	48.2	48.2	48.2
	A little bit	28	33.7	33.7	81.9
	Moderately	10	12.0	12.0	94.0
	Quite a bit	5	6.0	6.0	100.0
	Total	83	100.0	100.0	

Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a poundingheart.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	63	75.9	75.9	75.9
	A little bit	9	10.8	10.8	86.7
	Moderately	6	7.2	7.2	94.0
	Quite a bit	2	2.4	2.4	96.4
	Extremely	3	3.6	3.6	100.0
	Total	83	100.0	100.0	

I had dreams about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	59	71.1	71.1	71.1
	A little bit	12	14.5	14.5	85.5
	Moderately	8	9.6	9.6	95.2
	Extremely	4	4.8	4.8	100.0
	Total	83	100.0	100.0	

I felt watchful and on-guard.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	34	41.0	41.0	41.0
	A little bit	14	16.9	16.9	57.8
	Moderately	16	19.3	19.3	77.1
	Quite a bit	13	15.7	15.7	92.8
	Extremely	6	7.2	7.2	100.0
	Total	83	100.0	100.0	

I tried not to talk about it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at All	41	49.4	49.4	49.4
	A little bit	15	18.1	18.1	67.5
	Moderately	13	15.7	15.7	83.1
	Quite a bit	9	10.8	10.8	94.0
	Extremely	5	6.0	6.0	100.0
	Total	83	100.0	100.0	