

**HIGH-CRIME NEIGHBORHOODS AS A WAR ZONE: COMPARING TRAUMA  
AS A RESULT OF WAR AND NEIGHBORHOOD VIOLENCE**

by

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**ABSTRACT**

Trauma and the resulting PTSD in Veterans returning home from war have been a focal point recently in the media. However, trauma among individuals living in high-crime neighborhoods and their resulting PTSD are less understood and appreciated. Sources indicate that many individuals who experience trauma have a higher probability of committing crimes, abusing drugs, being victims of or perpetrators of domestic violence, experiencing homelessness, and having interpersonal relationship conflicts. These are all public health concerns that are important to address. These issues impact not only Veterans but also individuals in environments that make them susceptible to experiencing trauma. This paper identifies some of the important similarities and differences between the traumatic experiences Veterans face during war time and those of individuals living in high-crime neighborhoods. A review of literature reveals that there are more similarities than differences between the trauma that these two groups face. In fact the studies presented in this paper suggest that civilians living in high-crime neighborhoods have a higher proportion of individuals experiencing symptoms of PTSD than Veterans returning home from war. Based on this finding this paper suggests educational and program resources already available to Veterans could be adapted to civilians to help reduce the burden of trauma and the resulting PTSD in civilians living in high-crime neighborhoods.

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## **PREFACE**

Much of the information gathered was from peer-reviewed sources as well as from gray sources and personal experiences. Peer-reviewed data that compared the experiences of individuals living in high-crime neighborhoods and Veterans returning home from war was limited. Therefore, ProPublica was used as a gray source in conjunction with available peer-reviewed data. Additionally, I worked at the VA in Pittsburgh as a social work intern (2015-2016) and some of the information in the discussion and conclusion sections of the paper incorporates ideas and comments gathered from Veteran interviews during this period.

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## 1.0 INTRODUCTION

Posttraumatic stress disorder (PTSD) has received more and more attention in the last few years because of Veterans returning home from the conflicts in Iraq and Afghanistan (Donley et al., 2012). PTSD can occur after an individual experiences or witnesses a traumatic event, which can result in this individual experiencing fear, horror, or helplessness (Donley et al., 2012). PTSD is identified through three distinct symptoms: re-experiencing the traumatic event, avoiding reminders of the trauma, and hyperarousal (Donley et al., 2012).

In 2012, a report by the Centers for Disease Control and Prevention (CDC) stated that around 180,000 people domestically in the United States (U.S.) die each year from injuries and violence. This number equates to approximately one person dying every three minutes from violence. Additionally, each year more than 2.8 million people are hospitalized and 29 million people are treated in emergency rooms because of wounds they incur from violence or injury (CDC, 2012; Casas et al., 2016). This can be compared to the number of military personnel who died and were injured during Operation Enduring Freedom (OEF), which is the war that occurred in Afghanistan from October 2001 to December 2014. During this period 1,844 soldiers were killed by combatants, and 508 died from non-hostile deaths (accident, illness/injury, homicide, and suicide) which resulted in 2,352 military personnel dying overseas (DeBruyne & Leland, 2015). This is in addition to the 20,065 who were wounded in action (DeBruyne & Leland,



2015). In Operation Iraqi Freedom (OIF), 3,482 died from hostile deaths and 930 died from non-hostile deaths resulting in 4,412 total deaths, in addition to the 31,949 who were wounded from March 2003 to December 2014 (DeBruyne & Leland, 2015). In summary, many more Americans died from violence in civilian neighborhoods than did military personnel in the OEF and OIF theaters of war. With the increasing focus on Veterans, their experiences with trauma and their resulting PTSD, little focus is given to civilians with PTSD and how their trauma impacts their lives (Donley et al., 2012). Are the rates and impact of PTSD similar for these two groups? The purpose of this paper is to explore and discuss the comparison of trauma arising from war vs high-crime neighborhoods. Are the lessons learned from treating Veterans' experiences with PTSD applicable to civilians with PTSD?

## **1.1 PUBLIC HEALTH IMPACT**

Trauma and post-traumatic stress disorder are public health concerns that impact the nation. Individuals from every part of the country are susceptible to experiencing trauma, have experienced trauma previously, or are living with PTSD. It is difficult to determine the exact number of people living with PTSD or another form of trauma (U.S. Department of Veterans Affairs, n.d.). Specifically, it is difficult to account for the number of individuals living in high-crime neighborhoods that have the clinical diagnosis of PTSD or are experiencing a form of trauma that does not meet the clinical diagnosis for PTSD. It can be hypothesized that more individuals have PTSD than are currently recorded. The U.S. Department of Veterans Affairs National Center for PTSD compared the civilian population to the military population. The

report found that in the civilian population six out of ten men and five out of ten women will experience at least one trauma during their life (U.S. Department of Veterans Affairs, n.d.). Of the individuals who experience trauma about seven to eight out of 100 people in the U.S. will have clinical symptoms of PTSD at some point in their life (U.S. Department of Veterans Affairs, n.d.). Additionally, this number equated to about eight million people in the U.S. living with PTSD per year (U.S. Department of Veterans Affairs, n.d.). The National Center for PTSD through the U.S. Department of Veterans affairs reports that approximately 11-20 out of 100 Veterans serving during OIF and OEF era will be living with PTSD each year. These rates are higher than the Gulf War (Desert Storm) Veterans with 12 out of 100 Veterans having PTSD each year. However, this is less than 30 out of 100 Vietnam era Veterans who experience PTSD during their lifetime (U.S. Department of Veterans Affairs, n.d.).

Veterans are more likely to have had a mental health evaluation post-deployment, especially now that the post-911 conflicts have continued for so long. However, many Veterans are still not being diagnosed with PTSD for a myriad of reasons. Some Veterans are unable to get the PTSD psychological testing done because they are unable to be sober for the evaluations. Others are diagnosed with adjustment disorder instead. More research needs to be done on the various types of trauma-related mental illnesses and how programs can be used to prevent or treat the adverse effects of trauma. This is a common idea also presented in a *Washington Post* article written by Patrick Mondaca, who served in the U.S. army in Iraq in 2003.

Sources indicate that many individuals who experience trauma have a higher probability of committing crimes, abusing drugs, being victims of or perpetrators of domestic violence, and having interpersonal relationship conflicts. These are all public health concerns that are important to address (Centers for Disease Control and Prevention, 2008; Beckett, 2014). These

issues impact not only Veterans but also individuals in environments that make them susceptible to experiencing trauma.

The effects of trauma can manifest themselves in many ways. Thus, experiencing trauma can lead to PTSD. This paper is specifically focusing on trauma and its relation to PTSD, as experienced by Veterans and individuals living in violent high-crime communities. Overall, this comparison focuses on individuals growing up in high-crime neighborhoods and Veterans experience of trauma of war, the resulting PTSD and the public health impact. Beckett (2014) quoted Donley et al. (2012) when she noted, “Neglect of civilian PTSD as a public health concern may be compromising to public safety” (p.1). The majority of people with PTSD who are undiagnosed or untreated will not behave in violent ways. However, a significant proportion of individuals with PTSD could react to situations in violent ways if they fail to receive adequate and appropriate treatment.

This paper will review the background of this topic beginning with PTSD and trauma, brain changes, PTSD and its relationship to crime, and explore trauma and its relationship to homelessness. Information about Veterans will be discussed first, and then information about individuals in high-crime neighborhoods will follow. A comparison of Veterans to individuals living in high-crime neighborhoods will then be presented. A summary of the paper, limitations of the paper and future direction for research will be offered.

## **2.0 BACKGROUND**

### **2.1 STRESS**

Stress is a part of everyday life. It is important for learning to survive and cope in the world. Reacting to stress and then coping with stress are essential skills that children need to develop to better adapt to situations in the future when they may feel threatened. Parents and caregivers of children are essential in showing and guiding them about stress and responding to it in physically and emotionally healthy ways (CDC, 2008). Managing stress is a valuable skill for children to have; however, stress can be detrimental if it is too much for the child to handle and they begin to feel overwhelmed. Experiencing a high level of stress over a long period can severely impact a child not only in the short-term but in the long-term as well (CDC, 2008). Being exposed to high intensity stress for a prolonged period can hinder the brain's early development and negatively impact the functioning of the child's nervous and immune system (CDC, 2008). It has also been reported that experiencing high levels of stress as a child can lead to alcoholism, depression, heart disease and other chronic illnesses in adulthood (CDC, 2008).

The National Scientific Council on the Developing Child (2005) explained three types of stress: positive, tolerable, and toxic. Positive stress occurs when stress is experienced for a short length of time. This type of stress is what most people experience every day. Examples of positive stress are meeting new people, going to a new place such as starting a new job, making new friends, or starting at a new daycare center. This stress is ordinary and with caregiver

support it can help the child develop normally (National Scientific Council on the Developing Child, 2005).

Tolerable stress is more intense but experienced for only a short period of time. Examples of this stress are experiencing a car crash, death of a loved one, or a natural disaster. Similar to the positive stress, with the guidance of a caregiver, children can develop normally and develop the skills they need to cope with this type of stress (National Scientific Council on the Developing Child, 2005).

Toxic stress occurs when an individual experiences an intense negative event for an extended period of time. Abuse and neglect are examples of toxic stress which can result in the child being unable to cope and adapt, especially if the threat is present for a prolonged period of time. When a child experiences this type of stress it can result in lasting changes in brain development (National Scientific Council on the Developing Child, 2005).

## **2.2 BRAIN CHANGES**

When an individual experiences stress the body naturally releases hormones. These hormones can impair the brain especially if exposure to high levels of the hormones is for a prolonged period of time. Toxic stress can impact the brain's neural circuits and in cases where an individual experiences a great amount of stress, the hormones released into the body can lead to a smaller brain (CDC, 2008). The neural connections in the brain are especially susceptible to damage during early childhood. It has been reported that toxic stress can damage these connections resulting in the child becoming overly reactive to negative experiences during their childhood and into adulthood. They develop a low threshold to stress and any adverse experience

can cause them to react in a non-normative way relative to how others who did not experience this stress would behave. Additionally, toxic stress and the hormones associated with it can suppress the individual's immune system as well as damage the hippocampus. This damage is especially concerning as this area of the brain is responsible for memory and learning. Damage to it can impact the individual's ability to learn into adulthood and result in being diagnosed with a cognitive deficit (CDC, 2008).

The Adverse Childhood Experiences (ACE) Study is a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic in San Diego. This study found a link between violence related stressors and repeated exposure to violence, such as intimate partner violence and high-risk behaviors, as well as negative health outcomes as adults (CDC, 2008).

Stress related to trauma can have a wide range of impacts on the brain (Bremner, 2007). Post-traumatic stress disorder (PTSD) has been shown to impact areas in the brain such as the amygdala, hippocampus, and prefrontal cortex. These brain areas are responsible for regulating emotions, memory, and judgment. PTSD is associated with specific symptoms that include "intrusive thoughts, hyperarousal, flashbacks, nightmares, and sleep disturbances, changes in memory and concentration, and startle responses" (Bremner, 2007, p.1).

As noted above, PTSD impacts the part of the brain that involves the memory of a traumatic event. In turn this part of the brain plays a significant role in the initiation of the fear responses. Bremner (2007) states that the section of the brain which inhibits the fear response is mediated by the amygdala and over time and with repeated exposure the fear response is extinguished. Additionally, it has been found that PTSD results in changes in cognition and brain structure, which include verbal declarative memory deficits. This has been found in individuals

who have PTSD as a result of combat and/or childhood abuse (Bremner, 2007). Bremner (2007) found the following:

Returning Iraq soldiers were shown to have diminished verbal memory performance compared to their pre-deployment baselines, with greater verbal memory deficits in Veterans with high levels of PTSD symptoms. These findings suggest that traumas, such as early abuse with associated PTSD, result in deficits in verbal declarative memory (p.3).

Additionally, Bremner (2007) indicates that the severity of PTSD is proportional to the level of changes in the brain; the more severe the trauma the more structural changes the brain undergoes. Experiencing trauma can significantly impact an individual's brain and in turn change an individual's life.

### **2.3 PTSD AND CRIME**

From 1977 to 2005 the number of people incarcerated in the United States increased 400 percent (Donley et al., 2012). The risk of being incarcerated has a strong relationship to income and race with individuals who are minorities and/or have low income more likely to be incarcerated (Donley et al., 2012). Veterans who are incarcerated are more likely to have serious problems with the law and justice system if they have PTSD compared to Veterans who do not have PTSD. Some Veterans with PTSD have been found to exhibit aggressive, hostile and violent behaviors (Donley et al., 2012).

Donley et al. (2012) conducted a study among inner city residents living in Atlanta, Georgia, to identify whether trauma exposure and civilian PTSD is associated with a history of violent charges and incarceration. The study included 4,113 participants recruited from non-psychiatric, medical, primary care waiting rooms at Grady Memorial Hospital in Atlanta, Georgia, over a 6-year period from 2005-2011. The participants were interviewed and asked questions about their demographic characteristics, trauma exposure during childhood and adulthood, current PTSD symptoms, and history of incarceration. The results of the study found that 23.9% of the participants did not earn a high school diploma, 69.1% of the participants were unemployed, 63.3% had a monthly household income of less than 1,000 and 27.7% had a substance abuse problem. Thirty percent or 1,265 of the 3,811 participants interviewed met the diagnostic criteria for PTSD. Of the individuals who met the diagnostic criteria for PTSD only 13% had been treated.

The study also showed that the participants with PTSD were more likely to have experienced trauma during childhood compared to individuals without PTSD. In addition to having been more likely to experience trauma during childhood, individuals with PTSD were significantly more likely to report experiencing more types of trauma as an adult compared to participants without PTSD. These traumas included physical and sexual abuse, witnessing a life-threatening accident, having a close friend or family member be murdered, being attacked with a knife or gun, or being attacked by another person with the intent to kill (Donley et al., 2012).

Additionally, participants with PTSD were more likely to be unemployed, have a history of drug and alcohol problems, and were significantly more likely to have been arrested, served time in jail, and to be charged with a violent offense (Donley et al., 2012). Research suggests that individuals who have a history of criminal behavior, substance abuse and aggressive tendencies



as a result of their PTSD are more likely to be arrested for criminal behavior (Bartol & Bartol, 2011). The judicial system acknowledges the influence of PTSD on behavior, and PTSD has been used as a reason for violent and non-violent criminal behavior. Conversely, individuals who use self-defense as a plea focus more on the symptoms of PTSD, citing low fear threshold or anxiety, which resulted in their committing a criminal act (Bartol & Bartol, 2011).

The symptoms and effects of PTSD have been around for many years; however, it is only relatively recently that this diagnosis has become well known (Nicholas, 2000). Before the acceptance of the diagnosis of PTSD, individuals who were suffering from the effects of a traumatic event were told that their symptoms were just associated with anxiety, depression, or traumatic neurosis (Nicholas, 2000). The stigma of this type of diagnosis made the victims of a traumatic event feel as though they were inferior individuals unable to cope with the consequences of that traumatic event. The development of the post-traumatic stress disorder diagnosis allowed for people without organic brain damage to have a classification for their symptoms. The establishment of this diagnosis allowed people to better understand that their symptoms were the result of a traumatic event and that they should not be held accountable for the lasting effects (Nicholas, 2000). With the implementation of this diagnosis, research was conducted and found, based on the criteria outlined in the DSM IV (1994) for PTSD, that approximately 90% of U.S. citizens are exposed to at least one traumatic event during their lives (Nicholas, 2000). Note that of those 90%, 25% will develop PTSD symptoms. This suggests that a percentage of individuals who are exposed to a traumatic event may develop PTSD and therefore be at increased risk for presenting criminal behavior.

Another important relevant study was conducted by Dutton and Hart (1992) who looked into the childhood and criminal history of 604 federal inmates. Their investigation was designed

to discover the impact of different types of childhood abuse and neglect and their relationship to violent and aggressive behavior exhibited as an adult. Dutton and Hart (1992) found that men who had been abused as children were three times more likely to engage in violent acts compared to non-abused men. The same relationship is true for men who were physically and sexually abused as they were more likely to be physically violent and sexually violent, respectively. The authors concluded that the violence hypothesis (individuals who experience childhood abuse are more likely to abuse others as adults) helps explain why the cycle of abuse continues.

While this study was conducted before the DSM IV description of PTSD, its results could still be generalized to explain the relationship between traumatic experiences and criminal behavior. The individuals in the study experienced traumatic, life-changing events as children, which enabled a continuation of the abusive traumatizing cycle. This also relates to the idea that experiencing a traumatic event does not automatically mean individuals are going to become a criminal. Other factors come into play as well. The severity and the repeated exposure to a traumatic event need to be taken into account when determining the likelihood of developing criminal behavior. Thus, the individuals in this study were most likely socialized into this abusive cultural norm which in turn caused them to continue the cycle (Dutton & Hart, 1992).

An estimated 200,000 Veterans are in U.S. jails and prisons, more than half because of violent offenses (Elbogen et al., 2012). Researchers examined data from a national survey of Iraq and Afghanistan Veterans. They found that 9% of the 1,388 participants surveyed reported that they had been arrested since returning home from military service. The majority of the arrests were associated with nonviolent, illegal behavior. This type of criminal behavior resulted in individuals receiving sentences of less than two weeks in jail (Elbogen et al., 2012). The

researchers also found that Veterans with PTSD or traumatic brain injury who reported having negative emotional affect such as anger and irritability were more likely to be arrested than other Veterans. In addition, the authors found that individuals who were more likely to be arrested had experienced a trauma at a younger age, were male, had witnessed family violence, had a prior history of arrest, misused alcohol/drugs, and had PTSD with a high degree of anger/irritability (Elbogen et al., 2012). The results of this study suggest that PTSD is not the sole cause of criminal behavior but, in fact, criminal behavior is more closely associated with substance abuse and prior criminal history. These individuals are at a greater risk for criminal behavior when they have PTSD in combination with those previously listed factors.

PTSD associated crime is not only a problem in the U.S. but also in other countries. Sherman, Fostick, and Zohar (2013) conducted a study that examined the criminal records of Israeli Veterans with and without PTSD. The study found that Veterans with PTSD were more likely to have criminal records compared to Veterans without PTSD. The researchers also found that criminal activity was not related to symptom severity; however, more Veterans with PTSD had their first criminal record after the traumatic event. This suggests that in concert with other factors the likelihood of an individual committing a crime increases with PTSD.

Increasingly attention has focused on Veterans and the relationship of PTSD and criminal behavior. Some literature has shown that among U.S. Vietnam Veterans there is an association with PTSD and criminal behavior, especially violence, alcohol, and drug abuse (Sherman, Fostick, & Zohar, 2013). This result is also supported by a study conducted by Wilson and Zigelbaum (1983), which found that there is a relationship between severity of PTSD and the tendency to commit illegal acts. Specifically, they found that combat role variables, such as exposure to stressors in Vietnam, and the severity of PTSD were significantly correlated with

criminal acts. The authors believe that PTSD is linked to the onset of criminal behavior through the “survivor mode of psychological functioning” (Wilson & Zigelbaum, 1983, p. 80). Survivor mode can be triggered by a wide range of environmental stimuli. Once the “survivor mode” is triggered, Veterans revert back to the survival skills they learned in combat to deal with stress. If conflict or stress exceeds the person’s ability to cope constructively with the situation, the Veteran may react to the event in the same way he or she once did in the war zone. This can be a significant problem if they return home and are attempting to assimilate back into civilian life. If these individuals instinctively default into the same behaviors they utilized in the war zones, they are exponentially more likely to commit a crime.

Life coping skills at home and life coping skills in a war zone are significantly different, which supports the rationale for using PTSD as a legal defense in the U.S. judicial system. Nicholas (2000) researched the trend of PTSD becoming the diagnosis of choice for those seeking amnesty, pensions, and excusable memory lapses. The judicial system acknowledges that PTSD does influence behavior and it has been used as a defense for violent and non-violent criminal behavior. PTSD in the legal system can be used as a way to plead insanity or self-defense. The insanity defense plea has been used in cases when individuals claim to have been experiencing a dissociative state, such as Vietnam War Vets who believed that they were back in the jungle when they committed their crime. In turn, individuals who use self-defense as a plea focus more on the symptoms of PTSD such as a low fear threshold or anxiety which resulted in the individual committing a criminal act, such as individuals suffering from battered women syndrome (Bartol & Bartol, 2011).

Post-traumatic stress disorder affects the lives of the people who experienced the trauma because of abuse, rape or combat induced trauma. No one definitive type of event causes

someone to develop PTSD; instead, typically a myriad of events cause someone psychological harm. As stated above, some believe that PTSD and instances of criminal behavior are linked; however, there are often other important contributing factors such as age, gender, witnessing family violence, prior history of arrest, and misuse of alcohol and drugs. These were all influential factors in determining the likelihood of an individual with PTSD committing a crime. Finally, given the previously mentioned information regarding PTSD and crime it can be concluded that the severity of symptoms that an individual with PTSD experiences directly relates to the possibility of their committing a crime. In conclusion PTSD does not appear to directly cause criminal behavior; however, PTSD can enable such behavior and should be a valid component to a defense plea within the U.S. judicial system.

## **2.4 TRAUMA AND HOMELESSNESS**

Trauma can greatly impact the probability that an individual will become homeless during their lifetime (Koegel, Melamid, & Burnman, 1995). Individuals are living on the streets trying to get by on a minimal amount of resources such as food, money, and clothing. Many factors contribute to an individual becoming homeless as an adult (Koegel, Melamid, & Burnman, 1995). Drug abuse is one commonly cited reason individuals are homeless. However, people do not use illicit drugs nor become alcoholics overnight, suggesting that other factors are the catalysts for this process that results in individuals becoming homeless as adults (Koegel, Melamid, & Burnman, 1995).

Previous research has supported the idea that childhood trauma plays a role in adult homelessness. Koegel, Melamid, and Burnman (1995) found that there is a link between

childhood trauma and adult homelessness. However, they also state that other factors are influential such as poverty, residential instability, and family problems. A study conducted by Lee et al. (2017) interviewed 350 homeless adults who are 50 and older living in Oakland, California, to assess if adverse childhood events were associated with negative mental health outcomes such as depressive symptoms, suicide attempts, or psychiatric hospitalizations. Each participant was evaluated based on self-report history of adverse childhood events such as physical neglect verbal abuse, parental death, parental incarceration, and child welfare system placement. These events were compared to their self-report history of depressive symptoms, suicide attempts and psychiatric hospitalizations (Lee et al., 2017). The authors found that older homeless individuals who had four or more adverse childhood experiences were more likely to have had a history of psychiatric hospitalizations compared to other individuals in the study who had fewer adverse childhood experiences. Additionally, the authors conclude that adverse childhood experiences are associated with negative health outcomes in older homeless adults (Lee et al., 2017). These results are similar to previously mentioned studies.

A study conducted by Montgomery, Cutuli, Evans-Chase, Treglia, and Culhane (2013) aligns with the above study. They found that childhood adversity such as abuse, household dysfunction and neglect had an impact on homeless individuals who were Veterans and non-Veterans. Specifically, the incidence of childhood adversity increased the likelihood that non-Veteran individuals would experience homelessness as an adult and poor physical health. Childhood trauma was correlated to increased likelihood of mental health problems in Veterans which in turn resulted in them becoming homeless as adults (Montgomery et al., 2013). The authors concluded that adverse childhood experiences alone do not ultimately result in someone

becoming homeless as an adult. Rather, while other factors come into play, adverse childhood experiences lay the foundation for adult homelessness (Montgomery et al., 2013).

Pluck et al. (2011) also suggest that other factors come into play when deciding whether childhood trauma is related to adult homelessness. The study examined the impacts of childhood trauma on neurophysiological behaviors. The researchers state that childhood abuse and neglect rarely occur independently from other factors such as domestic problems. However, they also stated that there may be an association of childhood trauma with deficits in adult neurobehavioral functioning and IQ scores (Pluck et al., 2011). Their conclusion is that a link exists between childhood trauma, neurobehavioral functioning, IQ scores, and adult homelessness.

Another study by Edwards, Holden, Felitti, and Anda (2003) surveyed adult members of a Health Maintenance Organization (HMO) to determine if there was a relationship between adult mental health and childhood maltreatment and abuse. These findings were similar to those findings of the above research study. Edwards and colleagues found that childhood physical and sexual abuse, as well as witnessing maternal battering were common occurrences for the individuals who were members of the HMO. Lower mental health scores were associated with more instances of witnessing or experiencing more than one form of childhood maltreatment/abuse (Edwards, Holden, Felitti, & Anda, 2003).

Keane, Magee, and Lee (2014) looked at how an individual's ability to recall childhood trauma was related to adult alcohol consumption by individuals with low housing security. The researchers found that the individuals who consume alcohol were more likely to report childhood experiences of violence than those who do not. However, individuals who abstain from drinking were more likely to be able to recall instances of childhood neglect (Keane, Magee, & Lee, 2014). Finally, the researchers found a link between alcohol consumption and low housing

security. This research suggests that being able to recall instances of childhood violence is linked to alcohol consumption which is linked to low housing security (Keane, Magee, & Lee, 2014).

Similar to the Keane, Magee, and Lee (2014) research, a study conducted by Tam, Zlotnick, and Robertson (2003) reported that adverse childhood events lead to adverse consequences as adults, such as substance use and abuse; this ultimately can lead to homelessness. Also, instances of childhood trauma were positively related to substance use. Furthermore, relative to the general population, their sample of homeless individuals had higher rates of childhood sexual and physical abuse (Tam, Zlotnick, & Robertson, 2003).

Browne (1993) found that the homeless population experiences more adverse childhood experiences. Calsyn and Rodes (1994) found that chronically homeless individuals are more likely to have experienced foster care or another institutional placement as a child, which can be related to them becoming homeless as adults. However, unlike previous research, they suggest that individual factors such as childhood trauma do not play a vital role in predicting adult homelessness. The researchers state that societal factors play a greater role than individual features. This difference can potentially be explained because this study was looking at the predictors of past and current homeless individuals. Therefore, it is thought that the researchers suspect that childhood trauma plays a role in an individual becoming homeless; however, societal factors play a greater role in keeping them homeless.



### 3.0 COMPARISON

#### 3.1 VETERANS

Below are the experiences Patrick Mondaca described in his 2017 *Washington Post* editorial titled *Not injured by war, but displaced*. As noted above Mr. Mondaca served in Iraq in 2003 as a military police sergeant in the U.S. Army:

In 2003, I went to Baghdad as a military police sergeant with the U.S. Army. I came home a different man. Instead of traffic, I see blocked convoys and kill zones. Instead of crowded subways and train platforms, I see hundreds of potential casualties hemmed in by machine-gun fire from superior advantages of height and terrain. On rooftops and window ledges and on the steeples of cathedrals, I see places of concealment for snipers. On our city sidewalks, I see the anxious faces of commuters running late. They are counting minutes. I am counting dead and wounded.

It's true-I do not have PTSD in the way it is traditionally defined. I did not suffer a trauma-that is, a specific occurrence of trauma, during my combat deployment. I bore witness to gruesome things in Baghdad, but to observe traumatic events is not necessarily to be traumatized by those specific events.

A soldier, however, may be traumatized by the entire wartime experience-by remaining in a continuous state of hyper-alertness and adrenaline. This theater of war rewires and reconditions the minds of returning soldiers.

I have sustained an adjustment of my person, of my sense of self, of my relationships and of what would have been my common surroundings in any peacetime society. My perception and understanding of the world have been altered: A house dog can be conditioned and trained to fight another dog to the death. A civilian can be conditioned to do harm to his fellow man-to maim, to wound and to kill. This is less a trauma than it is a casualty of war. It is a detachment from the rest of society- an inability of the soldier to come home completely (p. A 17).

Veterans who served in the military pre-9/11 and post-9/11 voluntarily risk their lives to perform the duties assigned to them by the government and to protect the lives of the citizens of the United States. This paper defines post-9/11 military involvement as any military intervention that occurred after the terror attacks that impacted the United States on September 11, 2001. When these men and women go overseas to protect our country they can expect to encounter stressful and traumatic experiences. As such, Veterans are at great risk for lifelong mental health issues (Kelly, Boyd, Valente, & Czekanski, 2014). Post-9/11 conflicts have resulted in more individuals with mental health concerns. Veterans serving in war zones as a result of the post-9/11 conflicts have no clear definition of who is the enemy and who is not. Therefore, they are in a constant state of alert and must be prepared for the possibility of an imminent attack at any time (Kelly, et al., 2014).

This constant state of alert along with repeated deployments directly contribute to an increased risk of PTSD and other mental illnesses. Gonza, Holden, and Kinsey (2014) as well as other researchers in the field found that individuals who have near-death experiences do not disclose those experiences to their health care providers out of fear of stigmatization. Therefore, Veterans are more likely to silently suffer with disturbing memories of combat. Additionally, with an increase in traumatic experiences and resulting PTSD, many Veterans have changes in

mood and attitude, which have been hypothesized to be linked to increased rates of suicide (Gonza et al., 2014). However, a study conducted by Conner et al. (2014) found it very difficult to establish the relationship between PTSD and suicide. Many individuals had a dual diagnosis of PTSD and another mental illness that impact Veterans such as depression, anxiety, and schizophrenia.

An article written by Elbogen et al. (2010) stated that Veterans can experience increased aggression and violent behavior when they experience chronic hyperarousal. Chronic hyperarousal is described as feeling constantly under extreme threat. Beckett (2014) quotes Sandra Bloom, who is a psychiatrist and former president of the International Society for Traumatic Stress Studies, stating, “very minor threats can be experienced, by what the signals in your body tell you, as, ‘you’re in acute danger’” (p.1). Therefore, individuals who suffer from hyperarousal may interpret a non-threatening action as threatening and respond in a violent manor that is self-preserving.

Corbin et al. (2013) conducted a study to assess the prevalence of PTSD and adverse childhood experiences in patients who are victims of interpersonal violence and are participating in a hospital-based violence intervention. Thirty-five participants were screened for PTSD and adverse childhood experiences six weeks after a violent injury. Of the participants screened 75% met the full clinical diagnostic criteria for PTSD. Of the participants, 56.3% reported that that they had three or more adverse childhood experiences. Additionally, during the study researchers reported that in order to “restore feelings of safety” the participants with symptoms of PTSD are more likely to carry a weapon.

### **3.1.1 Family problems among Veterans returning home from deployment**

Sayers, Farrow, Ross, and Oslin (2009) found that individuals returning home from military deployment can experience mental health issues. Of those Veterans returning home from Iraq and Afghanistan, 19.1% and 11.3% respectively experience mental health problems. These numbers are higher than the 8.5% of service members who experience mental health problems returning home during the same time period from non-conflict prone areas.

Sayers et al. (2009) found evidence that suggests that experiencing trauma during combat is related to changes in family functioning when returning home. Veterans who recently returned home from deployment and are diagnosed with depression or post-traumatic stress disorder, are five times more likely to have problems with their families and assimilating back into society compared to Veterans without these diagnoses (Sayers et al., 2009). Additionally, Veterans who have readjustment issues with their families are often avoidant, withdrawn, or anxious. Veterans who experience a greater severity of combat-related trauma saw greater impact on their family function. Traumas include constantly being attacked in the middle of the night by bombs or gun fire or seeing a friend die in from an improvised explosive device (IED).

These individuals had more instances of domestic violence than Veterans without combat related trauma. In a study conducted by Sayers et al. (2009), 199 Veterans responded to a questionnaire about their mental health and family functioning and readjustment. Over 50% reported mild to moderate levels of domestic abuse. Of the respondents, 4.4% reported that the domestic violence resulted in injury by a participating member. Approximately a third of Veterans who responded to the survey reported that their spouse or partner was afraid of them. Additionally, 25% of Veterans in the study reported that their children were either afraid of them or were not overly welcoming or warm to them.

### 3.2 INDIVIDUALS IN HIGH-CRIME COMMUNITIES

Krivo and Peterson (1996) discuss findings by William Wilson in his 1987 book, *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. The Krivo and Peterson (1996) report that the increasing expansion of disadvantaged poor urban areas has led to the social transformation of the inner city. This has resulted in extremely high crime rates. According to Krivo and Peterson (1996), Wilson (1987) makes an argument that the concentration of poor, disadvantaged individuals creates an environment of high crime because it breeds an area where a social structure develops that is different from areas that are not highly disadvantaged. Additionally, these areas experience a disproportionately high degree of social isolation from the surrounding neighborhoods as well as the mainstream society.

As a result, individuals living in these areas have less access to jobs and resources. Specifically, resources that promote positive role models and role models most people look up to are limited. Very few individuals who are not extremely impoverished live in these areas, which can create social isolation. The lack of working and middle-class families perpetuates the poor economic conditions of the community. Wilson (1987) states that these conditions result in the community not being able to support fundamental institutional structures for social control and in turn law and order. Therefore, this social environment of poverty and isolation can lead to high levels of crime.

Structural theory is used to explain the disproportionately high rates of crime in urban underserved communities. It is important to note that Wilson (1987), as well as Krivo and Peterson (1996), make it clear that crime is not a race issue, it is a neighborhood and structural problem that results in high levels of crime. Krivo and Peterson (1996) in their article identify areas that have poverty, disadvantages, and crime, areas where poverty and crime were not

synonymous with race and culture, to truly emphasize that crime is a product of the structure of a community. Krivo and Peterson (1996) also state that the disadvantaged economic environment of poor neighborhoods results in high crime levels because the environment is conducive to criminal deviance. These statements hold true today as gentrification continues to change the demographic and economic characteristics of cities that were once home to low-income communities. Individuals continue to be pushed out of cities into the neighboring suburbs that are away from critical social services. This can continue the social isolation which fosters disadvantaged economic environments for people living in these areas (Freeman, 2005).

As previously stated, the social structure that normally influences social control that deters crime from occurring is not in place. This in turn results in socialization in an environment where crime is normalized. This perpetuates crime as residents model their behaviors on others in the neighborhood, and if most role models in the neighborhood are involved in deviant activities, others will join in as well. This relates to the previously mentioned idea that socially isolated communities often do not have conventional positive role models. When impressionable members of the community witness deviant behaviors, and witness their role models engaging in deviant criminal behavior, it normalizes the behavior and leads to these individuals to also participate in criminal behavior. The article also states that there is a minority of individuals who try to promote anticrime and reduce deviant behavior but they lose their prestige and credibility to the deviant role models.

Massey (1995) states that as role models normalize crime, individuals in the community need to adapt to this crime prone environment. This in turn perpetuates crime and violence. Individuals living in these communities adapt to this environment and must always be prepared to use violence as a method to protect themselves, loved ones, or their property. As this mentality

begins to spread in communities, more and more people feel the need to protect themselves by any means possible. This encourages more individuals in the community to carry weapons, which may result in an increase in the number of people resorting to violence in order to defend themselves.

As stated previously, Krivo and Peterson (1996) reported that social isolation makes it difficult for community residents to have access to jobs and other resources. A disproportionately high number, of unemployed or irregularly employed individuals means that many residents spend a lot of time in the community during the day. The authors refer to this behavior as idling. Individuals who idle during the day spend more time in areas where unconventional role models spend their time and deviant behavior takes place. This results in an increase in probability of engaging in criminal behavior.

Lack of social ties and ties to the community also perpetuates criminal behavior. There is a lack of community collective responsibility to ensure that children and neighbors are assimilated in socially normative ways to positively influence children to not begin deviant behavior and to stay in school and join in positive and educational after school activities. Additionally, with all of the other factors discussed previously it is extremely difficult for poor, disadvantaged communities to have the resources as well as external and internal support to prevent and punish criminal behaviors.

Finally, Krivo and Peterson (1996) reviewed the 1990 census and crime data across the city of Columbus, Ohio, and found that poor, disadvantaged communities have higher rates of crime than communities that are not poor or disadvantaged. In addition, they found that this relationship between crime and disadvantaged communities is standard across white and black neighborhoods with the same disadvantages.

An epidemiological study of people living in Detroit, Michigan, found a high rate of PTSD among individuals living in the inner city (Donley et al., 2012). Individuals living in the inner city were found to have a higher frequency of exposure to trauma in general but specifically assaultive violence, injury/shock, witnessing trauma, experiencing the loss of an unexpected death (Donley et al., 2012). Of the inner-city residents surveyed in this study 54.2 percent experienced assaultive violence compared with 33 percent of residents who live in other areas of Detroit. The study found that inner-city residents in Detroit were two times more likely of developing symptoms of PTSD than residents that live in the suburbs (Donley et al., 2012).

Other studies have found that other inner cities in the U.S. have high rates of being exposed to trauma and high rates of getting PTSD as a result. Donley et al., (2012) cited a study that involved interviewing 617 patients at Howard University Hospital in the District of Columbia and found that 65 percent of them had experienced at least one traumatic life event that resulted in developing symptoms of PTSD. Of the 617 patients surveyed 279 had experienced one traumatic life event and 51 percent of that subgroup met the clinical criteria for PTSD.

### **3.3 VETERANS AND INDIVIDUALS LIVING IN HIGH-CRIME AREAS**

Few peer-reviewed articles compare experiences of Veterans and individuals living in high-crime areas. “Gray” sources, along with peer-reviewed sources, have been used to develop a comparison between the two groups. GlobalGrind and ProPublica are the “Gray” sources cited below.



Cabrera et al. (2007) surveyed men in the military to identify if adverse childhood experiences prior to being deployed had an impact on their likelihood of being diagnosed with PTSD upon returning home. In 2003, the researchers surveyed 4,529 male soldiers in the military who had not been deployed to Iraq. Another group of 2,392 male soldiers were surveyed in 2004, three months after returning home from Iraq. They found that adverse childhood experiences were an independent predictor of developing PTSD and depression. This effect was magnified further in soldiers exposed to combat. The researchers suggested that Veterans with adverse childhood experiences are more likely to develop PTSD and depression when exposed to combat (Cabrera et al., 2007).

A study on PTSD was conducted at Cook County Hospital which is a trauma center in Chicago, Illinois, that treats approximately 2,000 patients for gunshot wounds, stabbings, and other injuries each year. This makes it one of the busiest trauma centers in the country (Beckett, 2014). Beckett (2014) cited a study conducted by Reese et al. (2012) in which the number of patients who had PTSD surprised them. The researchers found that 43 percent of all patients who were screened had symptoms of PTSD and over half of individuals who were victims of gunshot wounds had signs of PTSD.

Beckett (2014) interviewed Kimberly Joseph, a trauma surgeon at Cook County Hospital. She stated, “We knew these people were going to have PTSD symptoms... (but) we didn’t know it was going to be as extensive (p.1).” Beckett states that research has begun to show that individuals with injuries caused by traumatic events develop PTSD at rates similar to Veterans who experience war: “Just like Veterans, civilians can suffer flashbacks, nightmares, paranoia, and social withdrawal” (Beckett, 2014, p. 1). Unlike the military that has begun to emphasize screening Veterans for PTSD and educating their families on the signs and symptoms of PTSD

as well as addressing the stigma associated with mental health treatment (Beckett, 2014), civilians do not get the same treatment. Individuals are wounded in their own neighborhoods and as they are not in a war zone, most of them are not getting treatment for the trauma they suffered let alone being diagnosed with PTSD (Beckett, 2014).

Beckett (2014) cited research from the U.S. Department of Veterans Affairs (n.d.) showing that approximately 8 percent of all Americans experience PTSD at least once in their lives. However, the incidence is higher in areas that have high rates of violent crime. These rates are as high as or higher than the rates of PTSD found in Veterans of the OIF and OEF who have rates of PTSD between 11-20% (U.S. Department of Veterans Affairs, n.d.).

Beckett (2014) cites the Grady Trauma Project, which studies exposure to trauma and PTSD in the civilian population, specifically those getting care at the Grady Memorial Hospital and Emory University School of Medicine in Atlanta, Georgia. In this study, researchers interviewed 8,000 individuals living in the inner city, and they found that two-thirds reported that they had been violently attacked. Half of the residents interviewed knew at least one person who had been murdered (Beckett, 2014). The Grady Project found that at least one in three individuals interviewed had experienced symptoms similar to PTSD at least once in their lives. Beckett (2014) reported that the lead investigator of The Grady Project, Kerry Ressler, believed that this is a “conservative estimate.” Additionally, Beckett (2014) reported that Ressler stated, “The rates of PTSD we see are as high or higher than Iraq, Afghanistan, or Vietnam veterans...We have a whole population who is traumatized” (p.1).

Zatzick et al. (2008) conducted a study to identify factors other than the severity of injury that played a role in an individual’s functioning after release from the hospital for a traumatic injury. A sample of 2,707 surgical patients was recruited from 69 hospitals in the U.S.

Individuals in this study were assessed for their PTSD and Depression Score 12 months after their traumatic injury. The authors reported that PTSD can have a great impact on an individual's life. In addition to the PTSD and Depression Score, the researchers assessed activities of daily living, health status, and ability to return to work and conduct major activities (Zatzick et al., 2008). The results of the study found that at a 12-month assessment of the participants, 20.7% of patients had PTSD and 6.6% had depression. PTSD and depression were found to have independent significant associations with impairments when compared to all functional outcomes. Beckett (2014) reports that an individual's inability to fully return to work can impact personal relationships, which can lead to family conflicts and problems at work or not being able to return to work.

This gray source, the GlobalGrind, made the connection between children experiencing violence in inner cities and the resulting PTSD to soldiers. A quote by Jeff Duncan-Andrade, Ph.D. from San Francisco State University stated in a GlobalGrind article,

Unlike soldiers, children in the inner city never leave the combat zone. They often experience trauma, repeatedly...You could take anyone who is experiencing the symptoms of PTSD, and the things we are currently emphasizing in school will fall off their radar. Because frankly it does not matter in our biology if we don't survive the walk home (Coleman n.d. p.1).

Coleman (n.d.) from the GlobalGrind reported that teachers from Fremont High School in East Oakland, CA have seen the impact of neighborhood violence:

These cards that (students) are suddenly wearing around their neck that say 'Rest in Peace.' You have some kids that are walking around with six of them. Laminated cards that are tributes to their slain friends," said teacher Jasmene

Miranda. Jaliza Collins, also a teacher at Fremont High School, said, It's depression, it's stress, it's withdrawal, it's denial. It's so many things that encompasses and embodied in them. And when somebody pushes that one button where it can be like, 'please go have a seat,' and that can be the one thing that just sets them off (p.1).

A lot of programs are available to Veterans to help them cope with their traumas and assist them to assimilate back into civilian life after their deployment. Utilizing existing government and civilian programs that help individuals with trauma and other psychosocial impairments will greatly benefit the public by reducing the negative outcomes that come as a result of individuals experiencing trauma. Experiencing a trauma such as a murder is difficult to overcome and if the proper psychological treatment is not provided to an individual who experiences trauma they may never fully recover (University of California at Los Angeles UCLA/RAND Prevention Center, 2016). Therefore, by combining the strengths of both of these entities and the programs that they provide, civilian and government programs may be able to address the psychological and behavioral changes that occur and improved the quality of life for the individual.

In addition, these programs can potentially break the cyclical nature of crime found in high-crime neighborhoods. By addressing the trauma, and the resulting brain and behavioral changes, the normalization of crime and criminal behavior can potentially be avoided. By diagnosing individuals as soon as they experience a trauma they can receive the appropriate treatment which can minimize any self-destructive behaviors that can manifest as a result of trying to cope with the trauma (University of California at Los Angeles UCLA/RAND Prevention Center, 2016). Early identification and treatment could break the cyclical nature of

crime and trauma allowing future generations to avoid experiencing trauma at such a young age. This would also aid in the reduction of the school-to-prison pipeline which will reduce the overall economic cost that mental illness and criminal behavior has on society (University of California at Los Angeles UCLA/RAND Prevention Center, 2016; Beckett, 2014).

A study reported by the CDC stated the Los Angeles Unified School District and UCLA/RAND worked together to record how student's exposure to violence can be mediated by Cognitive Behavioral Therapy Interventions for Trauma in Schools (CBITS) (University of California at Los Angeles UCLA/RAND Prevention Center, 2016). The basis for this research is that children who witness or experience violence may experience symptoms of PTSD or depression as a result of this experience. A randomized study of CBITS was conducted in two large urban middle schools in East Los Angeles. These two schools primarily serve Latino students. At the middle schools sixth-grade students were screened for exposure to violence and subsequent symptoms of PTSD and depression. The students qualified to be part of the study if they had significant exposure to violence and had clinical levels of PTSD symptoms (University of California at Los Angeles UCLA/RAND Prevention Center, 2016). Of the 769 students who were screened, 159 were eligible. This means that 20% of the sixth graders screened had experienced substantial exposure to violence and had clinical levels of PTSD symptoms.

The students were organized into groups with six to eight students each and met for ten sessions. In these sessions students were taught methods and techniques for managing fear and traumatic memories. These techniques included combating negative thoughts, coping with memories, solving social problems, and preventing relapse (University of California at Los Angeles UCLA/RAND Prevention Center, 2016). After three months of the intervention the researchers found that students showed fewer symptoms of PTSD and fewer symptoms of

depression compared to the non-intervention group. Additionally, it was reported that parents saw a significant reduction in psychological dysfunction (University of California at Los Angeles UCLA/RAND Prevention Center, 2016).

Trauma, PTSD and depression are all public health concerns because they can impact a child's ability to excel educationally and their psychological development. The CDC states that the experiences of violence disproportionately impact individuals living in low-income urban areas (University of California at Los Angeles UCLA/RAND Prevention Center, 2016).

## 4.0 DISCUSSION

Many similarities and differences exist among individuals who experience trauma. Some experience trauma during war time and some experience it every day in their communities. The results in this review compare Veterans' experiences of war and their mental health and behavioral outcomes to individuals who experience trauma as a child or violence every day in high-crime neighborhoods. Although the causes of trauma are different the impact on these two groups are often similar and many times these two groups overlap. Overall the results show that there is a relationship between traumatic experiences and negative personal and social behavior. In addition to the similarities there are also a few differences that should be addressed.

Experiencing any sort of trauma can change a person's behavior and instances of severe trauma can permanently change how the brain functions. As discussed previously, Veterans experiencing severe trauma during combat can have their perceptions, thoughts and behaviors affected, resulting in a diagnosis of PTSD. A Veteran who experiences severe trauma such as seeing a fellow soldier die or getting shot at themselves is similar to a civilian who experiences violence in a high-crime neighborhood. These experiences seem to cause similar alterations in brain chemistry, possibly resulting in the way both individuals see and interact with the world.

Veterans living in war zones are there for a specific period of time, and then they are able to go home to a presumably safe environment where they do not have to worry about IEDs and being shot at in the middle of the night. Even though they may have more than one tour to a war

zone their trauma is seen as short term. Although short, the trauma can be wide-ranging in severity. This is different from individuals growing up in violent, high-crime neighborhoods where residents can never escape the trauma and violence. They experience the stress of trauma from an early age, and this changes the way their brain develops. Their brains respond and react differently than other children who do not experience childhood trauma. These individuals adapt and learn how to survive in a violent environment. The continuous exposure to trauma continues to alter how the brain functions. Children learn what they need to do to survive and the adults and mentors in the community perpetuate these behaviors because they have grown up in a similar environment.

This is similar to what happens to some Veterans when they return home from war. Some Veterans have sensitivities to fireworks and cars backfiring, which reminds them of explosions, and their fight-or-flight responses are initiated. Veterans who have PTSD due to an experience of trauma from roadside IEDs may drive as far away from the side of the road as possible. This behavior is a safety adaptation that makes sense in a war zone but does not make sense for civilians driving down the highway. Individuals living in high-crime and violent areas experience similar adaptations. Their thoughts, behaviors, and actions make sense in an environment where crime is the norm and it is vital for survival to adapt to this environment.

In addition to adapting their thoughts and behaviors to their environment many individuals living in high-crime neighborhoods and Veterans returning home from war use drugs and alcohol to cope with their experiences. Many times, instead of acknowledging or accepting that they need help, they turn to substances so that they can suppress thoughts, feelings and perceptions arising from their trauma. Many Veterans have stated that when they return home



from war, they often want to return to the war zone because that is where their behaviors and actions make sense.

Also, Veterans who grew up in high-crime neighborhoods are more likely to experience PTSD when returning from war. Veterans and individuals living in high-crime neighborhoods are more connected because historically many individuals from lower income/high-crime neighborhoods enlist in the military. Therefore, they may enter into the service with pre-existing traumas. Experiences and the environment a person lives in impacts their thoughts and behaviors. When the events and environment are socially isolating or traumatic, changes in brain chemistry and thought processes may occur which can increase the likelihood of mental illness and/or criminal behavior.

#### **4.1 RESPONSE TO THE PROBLEM**

Hospitals, specifically trauma centers, are a focal point to screen, treat and support patients who may have PTSD as a result of their trauma. These institutions are where the aftermath of neighborhood violence can be addressed, and they can take the lead in increasing the rate of diagnosing and treating PTSD patients (Beckett, 2014). ProPublica surveyed top-level trauma centers in cities that reported the highest homicide rates (Beckett, 2014). The results of the survey found that only one hospital in 21 cities with top level trauma centers screened all seriously injured patients for PTSD. Many other hospitals had underdeveloped screening methods for PTSD and many hospitals surveyed had few to no resources to address PTSD. Beckett interviewed John Porter, a trauma surgeon in Jackson, Mississippi:

We don't recognize that people have PTSD. We don't recognize that they're not doing their job as well, that they're not doing as well in school, that they're getting irritable at home with their families.....When you think about it, if someone gets shot, and I save their life, and they can't go out and function, did I technically save their life? Probably not (p.1).

Beckett (2014) reported that in the late 1990s the RAND Corp. started interviewing violently injured adolescent men in Los Angeles. During this time, many people did not believe that the RAND Corp. would find a connection between the violent injury and PTSD because many of the adolescents were members of a gang or connected to a gang, which would act as a protective factor for them from developing PTSD. Beckett (2014) interviewed Grant Marshall, a behavioral scientist who studied patients at a Los Angeles trauma center, who stated that "We had people tell us that we'd see a lot of people who were gang-bangers, and they wouldn't develop PTSD, because they were already hardened to that kind of life." However, he reported, "We didn't find that to be the case at all. People in gangs were just as likely as anyone else to develop PTSD" (p.1). Interestingly, the opposite occurred. The adolescent men were more likely to experience symptoms of PTSD if they had been attacked previously (Beckett, 2014).

Philadelphia, Pennsylvania, has named trauma as one of its major public health issues. The city of Philadelphia is developing a method to more systematically screen for PTSD by working with mental health providers. In addition, it is adding a component to address PTSD to help in drug and alcohol treatment. Philadelphia is also provided funding to allow city therapist to be trained in prolonged exposure to help patients with PTSD. This is a technique that the U.S. Department of Veterans Affairs (VA) provides to its therapists.

Philadelphia is working with local universities to help mediate the effect that violent injury has on the occurrence of PTSD. It also works with university programs to help reduce the occurrence of retaliation as a result of a violent injury and keep victims focused on themselves and ways that they can stay safe and recover from their trauma (Beckett, 2014). The main focus of these programs in Philadelphia is educating victims and families on the aftereffects a violent trauma can have on an individual and their family. Beckett (2014) interviewed Dr. Kerry Ressler, an Atlanta researcher, who commented on the importance of screening for PTSD in hospital patients.

We've certainly had decades of trying to apply political solutions and social solutions to our inner cities' financial problems and violence problem, and they haven't been successful," said Ressler, the Atlanta researcher. "If we could do a better job of identification, intervention and treatment, I think there would be less violence, and people would have an easier time doing well in school, getting a job (p.1).

The VA, much more than the civilian sector, has attempted to recognize and address the needs of individuals affected by trauma or have PTSD. Many lessons can be learned from the VA in the organization and development of community based programs that can and should be located in high-crime neighborhoods. Currently the U.S. Department of Veterans Affairs have a National Center for PTSD, which lists treatment locations, services offered, specialists, and a list of outpatient programs. Most notably at each VA medical center there is a PTSD specialist and programs available to Veterans who receive treatment at that medical center. Additionally, there are surrounding Community Based Outpatient Clinics that allow Veterans to seek treatment without having to go to a medical center. These medical centers and hospitals offer one-on- one

mental health assessment and testing, medications, one-on-one psychotherapy and family therapy, and group therapy. Additionally, some medical centers offer inpatient PTSD treatment (U.S. Department of Veterans Affairs, nd). Civilians living in high-crime neighborhoods having ready access to support and treatment services could be highly beneficial.

Improving screening and early intervention of at-risk individuals returning from war zones as well as individuals living in high-crime neighborhoods is crucial to positively impacting public health outcomes such as homelessness, drug abuse, violence, and criminal behavior.

## **5.0 CONCLUSION**

### **5.1 SUMMARY OF THE PAPER**

Trauma impacts people differently and can manifest itself in a myriad of ways. This paper discussed similarities and differences of Veterans who experience trauma as a result of violence while deployed in a war zone and individuals who experience trauma as a result of violence on home soil in high-crime neighborhoods. Similar structural changes in brains have been found in both of these groups of individuals. In addition, experiencing substance abuse, homelessness, interpersonal conflicts, and criminal behavior have been seen in both groups. However, there are differences in the two populations. Veterans are in an environment for a defined amount of time before they are able to return home to a presumably safe environment. Individuals living in high-crime environments have few opportunities to escape crime and violence.

A significant public health impact comes as a result of trauma. Many individuals experience trauma that results in PTSD. This trauma can have a negative impact on their health outcomes. It is imperative to address the cognitive, behavioral, and social outcomes that result from an environment that exposes an individual to severe traumatic experiences. Individuals who experience the trauma of living in high-crime neighborhoods as well as the trauma of war are much more susceptible to developing significant PTSD. Addressing the root causes of trauma as well as providing early diagnosis and aggressive intervention can reduce or prevent the cycle of PTSD that occurs in both Veterans and individuals living in high-crime neighborhoods.

## **5.2 LIMITATIONS**

There are a number of limitations to this paper. Many of the articles were found using Google Scholar, PsycINFO, Pubmed and other academic data bases. Additionally, there were few sources that focused on high-crime neighborhoods in general therefore; some of the sources are somewhat dated. Even though they are relatively old they are still relevant. Not every article on PTSD and trauma was read so there may be additional information on how these two groups compare. Additionally, this paper focused specifically on trauma, how individuals experience trauma and how that affects their thoughts, behaviors, and actions. Many other factors need to be taken into account to understand why some neighborhoods experience more crime and violence than others. This paper focused specifically on trauma as a result of the environment to identify similarities of Veterans and individuals in high-crime neighborhoods. The goal was to bring to light that certain environments can increase an individual's susceptibility to experiencing trauma and possibly developing PTSD, which in turn can impact their behavioral responses. Neither race nor socioeconomic status alone can account for crime and deviance. Additionally, some gray sources were used as a result of the limited number of current peer-reviewed literature on the similarities and differences between Veterans returning from war and individuals living in high-crime environments.

## **5.3 FUTURE RESEARCH**

Future research can focus on developing interventions for both Veterans and civilians living in high-crime neighborhoods. Their experiences of PTSD as a result of trauma related to violence

should continue to be compared. The trauma Veterans experience while serving our country is part of a noble sacrifice and should be treated as such. However, more research should compare trauma as a result of violence on home soil to experiencing trauma as a result of violence overseas in a war zone. It can be hypothesized that experiencing a trauma as a result of violence that ended in a homicide is similar on home soil as to that overseas and the psychological treatment can be similar. Future research could also be conducted on the effects of trauma and how that impacts family and domestic violence. Currently there are few sources on how civilian trauma and PTSD influences family and relationships outside of the impacts of adverse childhood experiences have on individual outcomes. Additionally, future research can focus on how communities and countries in war zones address PTSD and how refugees from war experience trauma and PTSD.

Some Veterans prefer utilizing services in the community, and they are fine with seeking treatment with non-Veterans. However, this author does not recommend combining the programs so Veterans and non-Veterans receiving services together. These two groups have some similarities, but significant differences exist between military and civilian cultures that should be considered. More research should be conducted on the impact of Veterans and non-Veterans receiving psychological treatment for similar experiences but as a result of different environments.

Large tertiary community hospitals and trauma centers are the cornerstone for innovative program development for both the Veteran and civilian populations. Health services research should embrace multiple healthcare stakeholders. Clearly no one group, body or institution alone can be effective given the magnitude of this problem. A regional system-wide approach should be embraced with trauma centers at the core of this research endeavor. However, there first must

be a full assessment of the fiscal and societal impact of the consequences of trauma induced PTSD. This situation is underappreciated and, thus, underfunded. Future research should explore strong public/private collaborations to construct an integrated approach to diagnosing and treating PTSD on a system-wide level.



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