THE TRAUMATIC IMPACT OF COMMUNITY VIOLENCE EXPOSURE ON PRIMARY SCHOOL CHILDREN IN TRINIDAD AND TOBAGO

By

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To my parents
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THE TRAUMATIC IMPACT OF COMMUNITY VIOLENCE EXPOSURE ON PRIMARY SCHOOL CHILDREN IN TRINIDAD AND TOBAGO

By

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The current study applies an ecological transactional framework to examine the impact of exposure to community violence on levels of trauma among children who live in high crime communities in Trinidad. Using a multiple regression research design, this study examined how community violence exposure through hearing, witnessing and/or direct victimization within two communities with high levels of crime differentially impacted levels of trauma among 51 students who attended school in the communities. The sample (n = 51) recruited for this study consisted of students aged 7 to 13 years of age, 29 males and 22 female students. Children’s exposure to community violence through hearing, witnessing and direct victimization was shown to be significantly related to PTSD symptoms. However, direct victimization and gender were the only significant predictors of PTSD symptoms when all variables were included in the model. Implications for practitioners, researchers and their future work with children who live in high crime communities beyond the United States are discussed. Implications for what these findings may mean for local government practices on the island of Trinidad are also discussed.
CHAPTER 1
INTRODUCTION

Children who are exposed to community violence experience a range of psychological problems, including depression, anxiety, posttraumatic stress disorder (PTSD), and suicidal behaviors (Aisenberg & Herrenkohl, 2008; Margolin & Gordis, 2000; Osofsky, Wewers, Hann & Fick, 1993; Sieger, Rojahs-Vilches, McKinney & Renk, 2004). Community violence research posits three manifestations of community violence: hearing about, witnessing and victimization (Fowler, Tompsett, Braciszewski, Jacques-Tiura & Baltes, 2009; Lambert, Nylund-Gibson, Copeland-Linder & Ialongo, 2010).

Findings related to the deleterious effects of community violence exposure are especially significant, considering the developmental vulnerability of children (Margolin & Gordis, 2000).

While being exposed to community violence, children have been known to display general inabilities to adjust to the challenges that are common for their stages of development (Margolin & Gordis, 2000). While research in this area has been steadily accumulating over the last two decades (Garmezy, 1993; Margolin & Gordis, 2000), studies on community violence have primarily focused on neighborhoods in the United States (Hyatt, 2011). Literature extending such analyses to other international contexts are beginning to proliferate (Cummings, Merrilees, Taylor, Shirlow, Goeke-Morey & Cairns, 2013; Shields, Nadasen & Pierce, 2008; Ximenes, de Assis, Pires & Avanci, 2013) in the Caribbean, but are still mostly limited to Trinidad’s Caribbean neighbor, Jamaica (Bailey, 2011: Bailey & Coore-Desai, 2011; Hyatt, 2011; Pottinger, 2005).

Community violence is an international, burgeoning and salient problem in need of further investigation (Fowler, Tompsett, Braciszewski, Jacques-Tiura & Baltes, 2009;
Shields et al., 2008). Further study is needed to assist in the discovery of adequate community and individual responses that can lessen the negative impact of community violence on the psychosocial welfare of persons—namely children (Aisenberg & Herrenkohl, 2008). Worldwide, a growing pervasiveness of acts of violence in communities has made this phenomenon a near inevitable part of the human experience (World Health Organization, 2002).

Within the Caribbean region, studies on issues related to community violence are thought to be an expanding topic of interest. According to the United Nations Office on Drugs and Crime (UNODC, 2007), there has been an increase in rates of violent crimes in the region. Per capita, murder rates are among the highest in the world (UNODC, 2007). Escalating trends have been linked to weakening foreign relationships and local investments in exports (UNODC, 2007). As a Caribbean nation, the twin-island nation of Trinidad and Tobago is not exempt from the above-mentioned general trends reported for the Caribbean region.

Trinidad and Tobago reports one of the highest murder rates annually in the Caribbean. Between 1998 and 2008, annual murders increased 458%. At the end of 2014, the total number of murders was 403 (Police Service Serious Crimes Statistics, 2015. By the end of August 2015, 282 murders were recorded for the year (Police Service Serious Crimes Statistics, 2015). Specific to the island of Trinidad—the larger and more industrialized of the two—these rising statistics (Kochel, 2009) have impacted its economic stability, social milieu and international ranking. These adverse social surroundings are harmful for children, thus their developmental health is negatively impacted by the presence of community violence.
In addition to having greater likelihoods for suffering negative psychological effects (Fowler et al., 2009) following exposure to community violence, quality of life outcomes for individuals in these communities often feature compounding reciprocity with other social struggles (Bacigalupe, 2010; Lynch, 2003; Margolin & Gordis, 2000), and interacts with gender and ethnicity variables (Stein, Jaycox, Kataoka, Rhodes & Vestal, 2003; Wilson, Rosenthal & Battle, 2007; Ximenes et al., 2013). For instance, research on community violence in the US indicates that males, ethnic minorities, and persons from poor communities were more likely to be exposed to violence and suffer adverse social and tangible consequences (Buka, Stichick, Birdthistle, & Earls, 2001; Eamon, 2001; Wilson et al., 2007). In addition, research confirms that posttraumatic stress associated with CVE can affect children’s school functioning (Mathews, Dempsey & Overstreet, 2009). PTSD in children has also been found to correlate with general anxiety and depression. Dulmus’ (2003) review found that exposure to community violence could lead to trauma, secondary trauma and emotional consequences for children. Additionally, empirical studies have shown that significantly more PTSD symptoms were found among hospitalized adolescents (Fehon, Grillo & Lipschitz, 2001). Adults who have experienced trauma in childhood have reported violent and aggressive behavior, nonviolent criminal behavior, substance abuse vocational difficulties, and interpersonal problems later on in life (Brown, 2005).

Research has also indicated that youth with high exposure to community violence were more likely to report impulsive behavior and depressive symptoms than those who experience low levels of exposure to community violence (Lambert et al., 2010). By applying the ecological transactional framework derived from
Bronfenbrenner’s ecological theory and a positivistic epistemology, this study will elucidate contextual influences of PTSD within children who are exposed to community violence in Trinidad and Tobago. Bronfenbrenner’s ecological theory consists of five overlapping layers of environment: the micro-system (e.g. family, school setting), meso-system, exo-system (e.g. neighborhood, mass media, and health services) macro-system (e.g. overarching attitudes and culture) and chronosystem (e.g. divorce) (Bronfenbrenner, 1979; 1994). This study will allow an examination of the interactions between children and the exosystem. As it pertains to inquiries on community settings and child development, the exosystem’s indirect influence on the child’s life makes it of utmost importance.

**Statement of the Problem**

There has been a significant increase in violent crime in Trinidad and Tobago (Kochel, 2009). Murder figures for 2014 were 403. In 2009 the number of murders reached a dramatic peak of 547 in 2009, quadrupling from 120 in 2000 (Ministry of Planning and Sustainable Development Central Statistical Office, 2009; Trinidad and Tobago Police Service – Police Service Serious Crimes Statistics, 2015). Increased criminal gang activity and the illegal drug trade have infiltrated communities throughout the country (International Narcotics Control Strategy Report, 2010). Most of the violent crimes, including murder, wounding, shootings, burglaries, break-ins and robberies are committed in communities surrounding the capital city, Port of Spain (Ministry of Planning and Sustainable Development Central Statistical Office, 2009). Caribbean nations like Trinidad and Tobago are unable to effectively respond to problems such as organized crime and street gangs as they lack institutional capacity. This is reflected by
decreased conviction rates for crimes committed (Zimmermann, Lawes & Swenson, 2012).

For individuals living in certain communities, experiencing, witnessing and hearing (Scarpa, Hurley, Shumate, & Haden, 2006) about crimes and violence committed within their local communities is an everyday reality. Community violence includes systematic and institutional violence perpetrated against a community or groups of people publicly, economically, politically or socially (Bowen & Brown, 2008). Types of community violence exposure often described in the literature include victimization, hearsay, and witnessing (Lambert, Nylund-Gibson, Copeland-Linder & Ialongo, 2010). Youth who reside in communities where they experience CVE regularly experience mental health effects such as PTSD symptoms, depression, dissociative coping, aggressive behaviors, and substance abuse. Children can also experience physiological effects such as increased heart rates, sleep disturbance, elevated or lower cortisol levels, and disruptions in physical growth, onset of puberty and cognitive, social, and emotional development. The extent of these effects usually depends on how the violence is experienced (Buka, Stichick, Birdthistle, & Earls, 2001).

Children in these communities are particularly vulnerable. Exposure to community violence can have a psychological and emotional impact on the well-being of primary school (elementary) age children (Dulmus, 2003). Thus, this study will be conducted to examine the traumatic impact of CVE on primary school children who live in communities of Trinidad and Tobago where there are police reports of high incidences of murder, woundings, shootings, burglaries, robberies and gang activity. This study will provide outcomes that depict the trauma implications of community
violence exposure via hearing, witnessing, and direct victimization, as manifested in PTSD symptoms.

**Purpose of this study**

As the crime rates in Trinidad continue to rank among the highest in the Caribbean (Zimmerman et al., 2012), and the potential of increasing prevalence of CVE’s relationship to PTSD in children, it is imperative to ascertain the extent to which schools and communities influence the presence of trauma among its youth. Thus, this study proposes to apply the ecological transactional framework to examine the impact of exposure to community violence on levels of trauma among primary school children who live in high crime communities (the exosystem ecological level) in Trinidad. Specific attention will be paid to how hearing, witnessing and/or experiencing violence within communities with high levels of violence differentially impact said levels of trauma. This study asks five research questions with regard to the primary school children in Trinidad and Tobago:

1. What is the relationship between hearing CV and the level of traumatic impact/PTSD symptoms?
2. What is the relationship between witnessing CV and the level of traumatic impact/PTSD symptoms?
3. What is the relationship between experiencing CV through direct victimization and the level of traumatic impact/PTSD symptoms?
4. What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and the level of traumatic impact/PTSD symptoms?
5. What is the relationship between hearing, witnessing, and direct victimization and PTSD symptoms when controlled by gender, age and ethnicity?
Significance of the Study

Previously, studies have examined the traumatic impact of community violence on school-aged children in the United States, primarily (Garbarino, 2001), and in Jamaica (Bailey, 2011; Bailey & Coore-Desai; Hyatt, 2011) and other countries (Cummings et al., 2013; Shields et al., 2008; Ximenes et al., 2013). There has been no empirical research conducted on the island of Trinidad specific to the presence of community violence and its influence on the approximately 45,000 children who live in the most violent areas in the country (Ministry of Planning and Sustainable Development Central Statistical Office, 2009a, 2009b). This study will examine the impact of CVE on children in the context of the Trinidad and Tobago society. There is a dearth of literature on this particular issue in Trinidad and Tobago. This study endeavors to assess the nature of PTSD symptomatology in Trinidad and Tobago in comparison to how it is described in the US. The findings of this research will also contribute to the literature on ecological transactional framework and its application to this topic. This study will address gaps in research as it will apply the ecological transactional framework to assess the traumatic impact of community violence on primary school children in Trinidad and Tobago. Through this lenses the stakeholders will be able to examine this issue and see the impact that traumatic occurrences such as community violence within the exosystem has an impact on children. Resolutions and interventions to this issue can then be formed using the structure of the ecological-transactional framework.

Need for Study

The findings of this study will be used to inform policies targeted toward addressing the problems that emanate psychologically from community violence. Social
workers, guidance counselors, mental health counselors and psychologists who work within the education system may be able to develop interventions to help children who are affected by the crimes and violence in their communities based on the findings. The results may also guide school administrators, policy makers, and Ministry of Education officials in Trinidad and Tobago who usually plan and approve the programs implemented within schools. By gaining a better understanding of the traumatic impact of community violence on elementary school children in Trinidad and Tobago, and using evidence from empirical data, the aforementioned stakeholders can better understand both the frequency and impact of this phenomenon. This information may assist stakeholders in developing, supporting and implementing the programs and interventions that will help the affected children.

Findings from this study will also serve to clarify the misconceptions of disruptive school behaviors, masked as PTSD symptoms such as disorganized or agitated behavior demonstrated by children who have been exposed to community violence (American Psychiatric Association, 2000).

The prevalence of crime in Trinidad and Tobago is a salient social issue. An investigation on the impact of its most vulnerable demographic in the population is critical to understanding the nature of the phenomenon and developing strategies to address it. This issue must be examined so that the findings and implications of this study can inform interventions and preventive measures, minimize the encumbering features of the distressing trauma associated with community violence.
Definition of Terms

Bronfenbrenner's Ecological Theory - Consisting of five overlapping layers of environment (micro-system, meso-system, exo-system, macro-system and chronosystem), this theory refers to the types of influences exerted by institutions, communities and society on children (Bronfenbrenner, 1979; 1994).

Community violence (CV) - Refers to violence that happens in the public that includes experiencing or witnessing interpersonal violence including robbing, gang violence, fighting, looting and homicides (Bowen & Brown, 2008). For the purpose of this investigation, Community violence is defined as the violent acts committed in the public including, interpersonal violence such as fighting, robbing, gang violence, looting or murders that are witnessed or experienced by persons in the community.

Community Violence Exposure (CVE) - Refers to types of community violence that members of a community may experience including: experiencing direct victimization, witnessing (visual) and hearing (vicarious) acts of violence (Buka et al., 2001).

Ecological Transactional Framework – A model of development based on the idea that individuals exist in multiple ecological contexts (macrosystem, exosystem, and microsystem) represented as nested concentric circles, that impact each other through transactions (the mutual impact between two ecologies over time) and interactions (the impact of one ecology on another) to affect their development (Bronfenbrenner, 1979; Cicchetti & Lynch, 1993; Lynch & Cicchetti, 1998; Overstreet & Massa, 2003). The ontogenic level is the fourth level of analysis that focuses on the individual's internal characteristics, including emotional regulation, their ability to cope and adapt as they develop (Overstreet & Mazza, 2003).
Posttraumatic Stress Disorder (PTSD) - Refers to the re-experience of events, stimuli and arousal states associated with specific instances of trauma. The diagnostic criteria consists of a history of a traumatic encounter (criterion A), symptoms from three symptom clusters including: avoidant numbing symptoms (criterion C), intrusive recollections (criterion B) and hyper-arousal symptoms (criterion D). Duration of the symptoms (E) is addressed by the fifth criterion and functional impairment in the social, occupational, or other essential areas of life (criterion F) is addressed by the sixth (American Psychiatric Association, 2000).

PTSD symptoms – Refers to the PTSD symptom clusters in criterions B, C and D assessed by the 17 symptom items (symptom severity scale) in the CPSS.

Trauma - The uncontrollable affective impacts of previous psychological damage that an individual experiences (Brown, 2008). The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) defines trauma as events experienced by persons which included “actual or threatened death or serious injury, or a threat to the physical integrity of others” (American Psychiatric Association, 2000, p. 467).

Traumatic Impact - Refers to PTSD symptoms criteria.

Trauma-Informed Approach – An approach to behavioral health service delivery that views trauma from an ecological and cultural perspective, acknowledging the important role of context in the way traumatic events are processed and perceived (SAMHSA, 2014).
CHAPTER 2
LITERATURE REVIEW

The purpose of this chapter is to provide a review of the literature related to this study. The following topics will be reviewed through the literature: (a) post-traumatic stress disorder in children, (b) PTSD, children, and community violence, (c) community violence exposure through witnessing, (d) community violence exposure through direct victimization, (e) Bronfenbrenner’s ecological theory, and (f) the ecological transactional framework.

Post-Traumatic Stress Disorder in Children

Exposure to life-threatening events are known to precipitate the onset of PTSD in children. Physical abuse, sexual abuse, violence (community and domestic), natural disasters, violent crimes, and motor vehicular accidents are among the incidents that have been shown to induce PTSD symptoms in children (Hamblen & Barnett, 2015). According to the National Survey of Children’s Exposure to Violence, 60.6% of the participants in a sample of 4549 children aged 0 to 17.2, witnessed or experienced victimization, while 25.3% witnessed domestic or community victimization within the past year (Finkelhor, Turner, Ormrod & Hamby, 2009). Another national study with a sample of 4,023 participants aged 12-17 reported that 47% of the sample experienced sexual or physical assault or witnessed violence once in their lifetime. Thirty nine percent witnessed violence, 22% experienced physical assault and 8% experienced sexual assault specifically in their lifetime (Kilpatrick, Acierno, Saunders, Resnick, Best, & Schurr, 2000).

Post-traumatic stress disorder, as defined in the DSM-IV-TR, results from exposure to a distressing event accompanied by a response categorized by
helplessness, horror or intense fear (Keane, Marx, & Sloan, 2009). PTSD can be caused by exposure to a traumatic situation where an individual witnessed, was confronted with or experienced an event or events that threatened or actually resulted in death or serious injury, or threatened the physical integrity of oneself or others (American Psychiatric Association, 2000). When children are exposed to traumatic situations as previously defined, its impacts can manifest as PTSD, with effects that can follow children into adulthood (Posttraumatic Stress Disorder in Children and Teens, 2012).

The first component of the PTSD diagnostic criteria involves a specific stressor the individual encounters. This criteria (criterion A) indicates that the event that confronts the individual must include threatened or actual serious injury or death, or threats to physically harm the individual or other. Additionally the response of the individual involved must include an acute fear, feelings of helplessness, or horror (American Psychological Association, 2000). The three categories of symptoms were identified to characterize PTSD include: “persistent re-experiencing of the traumatic event (Criterion B), persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (Criterion C), and persistent symptoms of increased arousal" and persistent symptoms of hyper-arousal (American Psychiatric Association, 2000, p. 463). For Criterion E, the length of time the symptoms from Criterions B, C, and D are experienced is more than a month. For Criterion F, the symptoms eventually cause clinically significant distress or disruption to the individual’s ability to function in the social, occupational and other essential aspects of their lives (American Psychiatric Association, 2000).
With the recent introduction of the newest version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), this criterion was revised to include diagnostic standards specific to children six years and younger, adolescents, as well as adults (American Psychiatric Association, 2013). Along with having a personal history of exposure to a traumatic event, the four additional symptom clusters are: Intrusive symptoms, persistent avoidance of stimuli associated with trauma, negative changes in mood and cognitions related to traumatic event(s), and significant changes in reactivity and arousal. The presence of symptoms from the four symptom clusters must also happen for more than a month and cause significant impairment in the social, occupational and other important spheres of functioning. The symptoms must also not be due to the use of a substance or the result of a co-occurring medical condition (American Psychiatric Association, 2013). Clinical correlates to PTSD found in children include: general anxiety, expiration anxiety, general anxiety and depression (Brown, 2005).

In addition to PTSD in children manifesting as disorganized or agitated behavior, children may also experience distressing dreams or nightmares or relive the trauma through repetitive play, and or reenacting the traumatic incident. Physical manifestations like headaches and stomachaches are also exhibited in children dealing with PTSD (American Psychiatric Association, 2000). To be diagnosed with PTSD the individual must have a history of exposure to a traumatic event as defined above, symptoms from each of the three symptom clusters for at least a month, that significantly affect one’s social, occupational or other essential areas of functioning (American Psychiatric Association, 2000).
It is important that mental health practitioners understand how PTSD symptoms are manifested in children and how each manifestation relates to the specific criterions. Criterion B (re-experiencing) may be displayed through repetitive play with themes related to trauma instead of through memories, and nightmares may not be specific to the trauma experienced, but more general in nature (Kaminer, Seedat & Stein, 2005). Some of the core symptom clusters displayed in adult PTSD may be seen in children, however children may present with symptoms such as regression, the development of new and reappearance of old fears, reckless behavior, accidents, separation anxiety and psychosomatic symptoms, not necessarily captured in some of the PTSD assessments (Kaminer et al., 2005). The anxiety that children may experience after a traumatic event may be displayed as increased impulsivity, distractibility, and hyperactivity associated with attention deficit hyperactivity disorder (ADHD) (Kaminer et al., 2005).

While the PTSD diagnostic criteria provide means of assessing for PTSD in children, it is limited in its dependence on the child’s ability to describe or express verbally their thoughts, feelings and experiences. The clinician therefore has to include behavioral observations, along with reports from teachers, parents and other individuals directly involved with the child, keeping in consideration parent’s tendency to minimize PTSD symptomatology in children (Cohen, Bernet, Dunne, Adair, Arnold, Benson, Bukstein, Kinlan, McClellan & Rue, 1998; Kaminer et al., 2005). Community violence exposure is an event that can lead to PTSD symptomatology in children (Dulmus, 2003).
PTSD, Children, and Community Violence

Community violence involves institutional or systemic violence publicly perpetrated against a community or group of people through economic, social or political (in) actions (Bowen & Brown, 2008). According to the World Health Organization (WHO) in their Report on Violence and Health (2002), violence is regarded as an intentioned exertion of physical force that results in either actual or a higher likelihood of physical or psychological injury. Studies conducted in the United States have shown that exposure to community violence can have negative psychological and emotional impacts on the wellbeing of elementary school age children (Brown, 2005; Wood, Foy, Layne, Pynoos & James, 2002). Researchers and practitioners have termed these impacts as traumatic because they manifest as trauma, secondary trauma and other emotional consequences (Dulmus, 2003).

In a study by Fehon, Grillo and Lipschitz (2001), inpatient adolescents exposed to community violence experienced significantly more PTSD symptoms. In addition to displaying PTSD symptoms, the adolescents displayed significantly more violence potential, drug-related problems and were more likely to have experienced child maltreatment and eventually became perpetrators of violence. Long term effects of community violence are well established. Adults with a history of exposure to trauma in childhood reported violent and aggressive behavior, substance abuse, nonviolent criminal behavior, interpersonal problems, suicidality and vocational difficulties (Brown, 2005).

Research has also indicated that youth with high exposure to community violence were more likely to report impulsive behavioral problems (Guterman, Cameron & Hahn, 2003) and depressive symptoms (Lambert et al., 2010). Guterman et al. (2003)
analyzed demographic and background information from agency case records, observational data from trained residential staff’s reports on behavioral problems and participants’ self-reports of exposure to violence. According to the findings, 87% of the participants reported experiencing or witnessing at least one type of severe community violence while 49% reported experiencing a minimum of two of the different types of serious community violence exposure. Hierarchical regression analyses revealed that sexual victimization and physical victimization (to a lower extent) were predictive of considerable behavior problems. Having witnessed physical violence was predictive of much less behavior problems in general. Lambert et al. (2010) found a higher predictive relationship between witnessing physical violence and exhibiting problem behaviors.

The authors’ study used a cross-sectional, longitudinal design to examine the patterns in community violence exposure from a sample of 543 early adolescent urban African Americans, in grades 6, 7 and 8. Latent class analysis assessed whether the youth could be categorized by their experiences with community violence. The findings revealed two categories of community violence exposure based on frequency: “high exposure” which accounted for most of (approximately 80%) the youth and a smaller “low exposure.” While controlling for intervention effects, students in the high exposure group displayed significantly higher level of impulsive behavior.

While little research has been published internationally in regards to community violence and PTSD symptoms in children to date, most studies in this area have establishes the rates and type of community violence that children experience beyond North American borders. For instance, Haj-Yahia, Leshem and Guterman (2011) examined rates and characteristics of community violence exposure among 833 Arab
adolescents between the ages of 14 and 18. The authors found that young Arab adolescents were exposed to community violence in rates that are commonly found in other nations, and that socio-demographic factors were not significantly related to level (low, mild or high) of community violence exposed to. Witnessing was the common form of exposure among adolescents in their sample. A more recent study by Leshem, Haj-Yahia and Guterman (2015) examined the relationship between community violence, social support and the presence of PTSD among a sample of 1930 Palestinian secondary schools students between that ages of 12 and 19. The authors found that PTSD was significantly predicted by community violence exposure. The authors examined the role that family support, teacher support, residential density, parents’ level of education, student’s age and gender.

In Trinidad, the rise in community violence was shown to significantly impact reports of fear among residents in communities with high levels of violence, specifically, and significantly impact gang crime among Mixed-race and Indo-Trinidadian citizens in general. Lane and Chadee (2008) explored fear of gang crime using a random digit dial survey of 516 residents of Trinidad in February 2005. While findings revealed that citizens did not necessarily consider their communities to be disordered, the respondents in that study did not think that there were ethnic disparities in gang crime that there was a crime problem. Also racial differences in the fear of gang crime were not observed. The respondents reported installing additional locks, burglar proofing, more secure windows, razor wire and getting weapons to increase their sense of safety (Lane & Chadee, 2008).
Similar to Lane and Chadee’s (2008) study, results from Adams’ (2012) qualitative inquiry showed Trinidadian citizens taking personal steps to increase their sense of safety. The authors examined how residents in a violent community in Trinidad adapted to the incapacitating problems that increases in violent crime bring. Members of the community who were witnesses of crime were often afraid to testify, for fear of being assassinated due to an ineffective witness protection system. Residents were also afraid to intervene when they witnessed confrontations. They used a variety of social distancing techniques to survive, including women’s use of “self-imposed ecological imprisonment” (p. 290) to be safe. Residents often used knowledge of the social organization and harmful geographical locations to keep children, friends and family safe. They advised them to avoid certain dangerous areas, present a defensive posture, build walls and to get dogs to keep neighbors safe.

Jamaica, like Trinidad and Tobago and the US, has very high levels of violence in its inner-city communities (Smith & Green, 2007; Maguire et al., 2008). Pottinger (2005) examined the migratory separation between parents and child ren with a sample of 90 children, aged 9 to 10 years old from inner-city communities in Kingston and St. Andrew. His study revealed high levels of community violence exposure while reporting that upward of 70% had heard gunshots near their residence and witnessed fights in the streets. More than 50% of both groups saw weapons used in fights and knew someone who died as a victim of violence. Thirty seven percent of the migration group and 59% of the control group reported having seen a dead body (Pottinger, 2005).

Bailey’s (2011) qualitative exploration among primary school children living in Kingston’s (Jamaica’s capital) inner city revealed several themes. These themes
included identification with the “nice badman dem,” who though feared, protected the community to some extent, distraction, being on the right side, and community violence experiences. The findings revealed how disturbed children were by the violence experienced in their daily lives. Their approach to discussing violence suggests a certain level of avoidant coping, while not the healthiest, it was a useful strategy in helping them to adapt to and survive the trauma they experience regularly (Bailey, 2011).

The impact of community violence on levels of aggression in primary school children in Jamaica was also investigated (Bailey & Coore-Desai, 2011). Using a mixed method methodology, the researchers investigated four schools (two private preparatory schools and two public primary schools). The qualitative review revealed that the children living in poor inner-city communities were exposed to more violent crime, while those from the rural primary schools experienced more problems with praedial larceny (theft of agricultural produce) and stealing. Inner city communities controlled by Dons have a more formal system to address grievances in the communities, while in rural agricultural communities issues were resolved through vigilante justice. Unlike studies from larger countries, this study showed no significant difference in aggression among the participants of the study. That finding may be due to the widespread nature of community violence in Kingston, where everyone is subject to the effect and where there are multiple means of witnessing and experiencing community violence (Bailey & Coore-Desai, 2011).

While there has important work on this topic, the limited scope of international studies on community violence exposure needs to expand and include more countries
from the Caribbean. Crime and violence in communities have increased within recent times, impacting the economic welfare of these countries (UNODC, 2007) in addition to the traumatic impact that is being investigated in the current study.

**Community Violence Exposure through Hearing and Witnessing**

The myriad forms of exposure to violent events can disrupt a child’s development through the manifestation of PTSD, cognitive effects, peer problems and even psychobiological effects. In children, the disruption of skill acquisition at various developmental milestones and at different ages has been shown to be one result (Margolin et al., 2000). Hearing, witnessing and (direct) victimization are three common types of community violence examined in the literature (Fowler et al., 2009; Lambert et al., 2010).

According to Fowler et al., (2009) hearing about CV is “learning of another person’s victimization by neighborhood violence”, (p. 229). Experiencing CVE through hearing had a positive relationship with PTSD symptoms in children within this sample. This finding is consistent with the Scarpa et al. (2006) study that found hearing about violence significantly influenced the levels of PTSD among a sample of 518 undergraduate young adult students. This study examined the lifetime CVE and socio-emotional outcomes of the sampled students and reported that 97.8% of the young adults hearing about violence at least once. Students scoring high on hearing about violence reported higher levels of PTSD symptoms, depressed mood, aggressive behavior and interpersonal problems related to personality disorders. Their study concluded that chronic CVE through hearing had deleterious effects (Scarpa et al., 2006)
Witnessing community violence is the most frequently reported means of CVE (Seedat, Van Nood, Vythilingum, Stein, & Kaminer 2000; Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004; Martin, Revington & Seedat, 2013). Witnessing general violent/criminal acts was one of three factors loaded from the exploratory factor analysis (EFA) conducted in the study by Martin et al., (2013), which assessed the psychometric properties of the CECV on a sample of South African youth who were exposed to trauma. In this study witnessing general violent/criminal acts was reported more frequently than the other factors including directly experiencing and witnessing family and non-family violence and threats of physical harm and directly experiencing non-family sexual abuse and general feelings of unsafety (Martin et al., 2013).

In Seedat et al., (2004) witnessing violence in the school and neighborhood were found to be independently predictive of PTSD. This study surveyed a sample of 2014 male and female students from 18 schools in Cape Town and Nairobi, to assess for trauma exposure, post-traumatic stress symptoms and gender differences for school children from two African countries. It was reported that over 80% were exposed to severe trauma through witnessing or victimization. The sample of Kenyan students had significantly higher rates of exposure to witnessing violence, sexual assault and physical assault by a family member than their South African counterparts.

Exposure to CV via witnessing is often investigated alongside victimization (Paxton, Robinson, Shah, & Schoeny, 2004; Shields, Nadasen, & Pierce, 2009; Martin et al., 2013). A study of a sample of children from Cape Town South Africa examined the overlap between experiencing violence through victimization, witnessing and perpetration within the school and neighborhood. They found that most of the children
that were victimized were also witnesses and perpetrators of violence (Shields et al., 2009).

**Community Violence Exposure through Direct Victimization**

Research has established that exposure to CV through direct victimization is often studied with witnessing CV and is usually a more powerful predictor of PTSD symptoms (Paxton et al., 2004; Fowler et al., 2009). Using linear regression to analyze exposure to CV through direct victimization, in a study of a non-random sample of African American male adolescents showed that using linear regression to analyze exposure to CV through direct victimization, witnessing and knowing a victim of violence revealed that direct victimization was the only significant predictor of depressive and PTSD symptoms (Paxton et al., 2004). Directly experiencing and witnessing family and non-family violence and threats of physical harm was one of the factors revealed in an EFA conducted to examine the psychometric properties of the CECV (Martin et al., 2013).

A sample of incarcerated adolescents exposed to significantly higher levels of sexual violence, and violent incidents in their communities was compared to a sample of high school students. The findings indicated that adolescents from the incarcerated group who reported higher levels of delinquent activity, also reported higher levels of PTSD symptomology (Wood et al., 2002).

In a cross-sectional study of the lifetime exposure to community violence on a sample of 101 children and adolescents in a residential treatment facility, 41% reported experiencing severe physical victimization, and 80% indicated that they witnessed severe physical victimization. The findings indicated that sexual victimization predicted
more behavioral problems than physical victimization and witnessing. Physical victimization was stronger predictor of behavioral problems than witnessing overall. The authors of this study emphasized the need for multidimensional assessments of violence exposure for adolescents and children in mental health settings such as residential and other facilities (Guterman, Cameron, & Hahn, 2003).

Review of the literature revealed a growing body of work in Trinidad and Tobago (e.g. Hernandez-Ramdwar, 2009; Katz & Fox, 2010; Mycoo, 2006) on crime and criminal gang activity in Trinidad and Tobago. These works are primarily intervention focused (e.g. Julien, 2008) and concerned with the source of community violence growth such as economic conditions (e.g. Mycoo, 2006), violence in the media (e.g. Hernandez-Ramdwar, 2009), and/or gang influence (e.g. Katz & Fox, 2010). The review of literature that I conducted in preparation for the current study revealed a dearth in research on CVE specifically and its effect on children in Trinidad and Tobago. The literature has established the numerous psychological effects of CVE and the developmental vulnerability of children who live in crime saturated environments. Thus, it is imperative to assess the levels of CVE that children in Trinidad and Tobago experience and the resulting effects.

Lambert et al. (2010) recommended future research focus on children in different contexts. While this study provided further insight into the negative impact of CVE the findings may not be generalized to the sample of children exposed to high levels of community violence in Trinidad and Tobago.
Theoretical Framework

Bronfenbrenner's Ecological Theory

Bronfenbrenner’s ecological theory proposes that development for human beings be considered within the context of their environment. To this end, explorations using Bronfenbrenner’s ecological theory have substantiated the significant influence that a child’s setting (school, community or societal) can have on his/her cognitive outcomes (e.g. Strayhorn, 2010; Whipple, Evans, Barry, & Maxwell, 2010).

Within the ecology of human development are nested ecological structures or levels, which influence the developmental trajectory of an individual’s life (Bronfenbrenner, 1979). These structures include, yet extend, beyond the immediate environment of the individual. Additionally, these levels interact and produce systems that impact the child’s lived experiences children (Bronfenbrenner, 1979, 1994; Cicchetti & Lynch, 1993). Bronfenbrenner, categorized these structures/levels as the: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Figure 2-1).

The microsystem, the level closest to the child that includes the family environment, peer and school settings, refers to the immediate setting of the developing child. The mesosystem refers to the interrelations between two or more of the settings in which the developing individual interacts. An example of this is the interaction between the family or home setting and the school as it impacts the development of the child. The exosystem describes the interconnections between settings outside the immediate setting (for e.g. neighborhood and media influences) that the developing individual is not actively engaged in, and the microsystem. Specifically, the exo-system describes influential persons in the microsystem that influence the influential persons in the meso-systems of the child’s life. The resulting influence on the child’s life is thought
to be the collective influence of adults in their immediate surroundings and other adults in the not so immediate surroundings. The macrosystem describes the broad overarching aspects of society such as political, social, and educational systems that influence cultural values and beliefs (Bronfenbrenner, 1979, 1994; Cicchetti & Lynch, 1993). The chronosystem considers the changes that take place over time and its impact on the individual and their environment (Bronfenbrenner, 1994).

These ecologies act together to influence the development of the child. This work is grounded by a belief that these environmental factors affect children on these ecological levels. This perspective has also helped researchers further understand the interaction of community violence on child and youth development (Garbarino, 2001). As a result the ecological framework has been used on its own and in collaboration with other theoretical models to understand the impact of exposure to CV on children and how the negative effects can be treated. Ecologically based frameworks that have been formulated to address community violence include the accumulation of risk model, cultural ecological framework and ecological-transactional framework (Cicchetti & Lynch, 1993; Gabarino, 2001; Jones, 2007; Letiecq & Koblinsky, 2003).

Pertaining to the application of Bronfenbrenner’s ecological theory in this present study, children who are exposed to CV in Trinidad—due to microsystemic factors, namely their families and schools—are located in communities (exosystemic) and are at the risk of developing PTSD symptoms. Based on the ecological framework interventions designed to help children deal with these negative effects need to be strategically developed from within the child’s ecology to ensure maximum efficacy.
Because Bronfenbrenner’s theory centralizes the environment while evaluating the child’s development, ecological frameworks have been used to examine protective factors, representing different levels of the child’s ecology including: child, caregiver, caregiver-child relationship and community that may protect children from the effects of exposure to community violence in a short-term longitudinal study. Researchers have identified factors such as quality of caregiver-child interaction, felt acceptance from caregiver and caregiver regulation of emotion as protective. The pattern of protection however, is reported to differ according to the means of adjustment and the child’s ecology (Kliewer et al., 2004).

Further, Bronfenbrenner’s basic theory of ecology and development has been expanded to include cultural considerations and their influence on the child’s lived experience. Letiecq and Koblinsky (2003) using the cultural-ecological approach, examined the strategies employed by African American fathers to protect their children from community violence. This approach, based on the integration of Afrocentric theory concepts within the ecological framework, features aspects of the Africentric perspective such as: authenticity, interconnectedness and harmony. Informal kinship, spirituality and combined support with the Afrocentric culture have functioned as buffers to the effects of chronic community crime (Jones, 2007).

**Ecological Transactional Framework**

The ecological-transactional model, an adaptation of Bronfenbrenner’s (1977, 1979) ecological theory, was conceptualized by Cicchetti and Lynch (1993). Drawing upon contributions from Belsky (1980), and Cicchetti and Rizley (1981), this framework purports that children exist in several ecological contexts that interact with each other to affect the child’s development (Bronfenbrenner, 1979; Cicchetti & Lynch, 1993; Lynch &
Cicchetti, 1998; Overstreet & Massa, 2003). With the ecological transactional model, the child’s development is examined through the lenses of transactions and interactions between the ecologies and how they affect the development level of the child, from birth onward. Transactions in the context of the ecological-transactional model refer to the mutual impact that two ecologies have on each other over a period of time. Interactions refer to the impact that one ecology has on another (Overstreet & Mazza, 2003). The ecological transactional model focuses on four levels of analysis: the macrosystem, exosystem, microsystem, and ontogenetic development, which involves the child’s competence and adaptation to accomplishing developmental milestones (Cicchetti & Lynch, 1993; Overstreet & Mazza, 2003). The proximity of these ecologies to the developing child vary. With the macrosystem being the most distal (Overstreet & Mazza, 2003).

This model provides justification for concerns about the impact of CVE, as it helps to identify and explain the interplay of adversity from multiple levels of the ecology and the potential negative impact they have on the development of children who experience CVE (Lynch & Cicchetti, 1998). The interplay of exposure to community violence occurring in the exosystem has ramifications for violence within the family (microsystem). The neighborhood a child lives in can influence the likelihood of being exposed to CV. Most of the studies on CV usually feature neighborhood with the following the risk factors for CVE: lower socioeconomic status, lack social control, social disorder and times places and circumstances where exposure to violence is most likely to occur (Salzinger et al., 2002).
The four-tiered conceptualization of the ecological-transactional and its interaction with the impact of exposure to community violence on children was been further validated in a cross-cultural study of a sample of Mongolian boys aged 3 to 10 years old. The presence of CV, cultural acceptance of violence as discipline, and contact with extended family were among eight risk factors investigated in this study that utilized applying structural equation modeling (Kohrt, Kohrt, Waldman, Saltzman & Carrion, 2004). The various ecological conceptualizations of the impact of exposure to CV confirm its negative impact on the wellbeing of children who live in communities with high levels of exposure to CV (Letiecq & Koblinsky 2003). In this present study the interaction between CVE, which occurs in the exosystem, and the effects on the ontogenic level through PTSD symptoms will be explored. The ontogenic level of the ecological transactional model includes the factors within the child that affect how he or she copes and adapts to challenges encountered in his or her path of development (Cicchetti & Lynch, 1993; Overstreet & Mazza, 2003).
Figure 2-1. Ecological Framework

Source: Dockrell and Messer (1999, p. 139)
CHAPTER 3
METHODOLOGY

This study examines the traumatic impact of the CVE on primary school-aged children living in high crime communities in Trinidad and Tobago. The relationship between CVE and its traumatic impact on children, as measured by PTSD symptoms, was explored. The purpose of this chapter is to present a review of the methodology utilized to examine the guiding research questions. This chapter includes a description of the setting, participants, variables, instrumentation, data collection and data analysis.

Research Questions

1. What is the relationship between hearing CV and the level of traumatic impact/PTSD symptoms?

2. What is the relationship between witnessing CV and the level of traumatic impact/PTSD symptoms?

3. What is the relationship between experiencing CV through direct victimization and the level of traumatic impact/PTSD symptoms?

4. What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and the level of traumatic impact/PTSD symptoms?

5. What is the relationship between hearing, witnessing, and direct victimization and PTSD symptoms when controlled by gender, age and ethnicity?

Hypotheses

1. There is no relationship between hearing of community violence and traumatic impact/PTSD symptoms.

2. There is no relationship between witnessing community violence and traumatic impact/PTSD symptoms.

3. There is no relationship between experiencing community violence through direct victimization and traumatic impact.

4. There is no relationship between hearing, witnessing and experiencing CV through direct victimization and the level of traumatic impact/PTSD.

5. There is no relationship between hearing, witnessing, and direct victimization and PTSD symptoms when controlled by gender, age and ethnicity.
Research Context

Urban communities in Trinidad and Tobago are considered extremely dangerous (Kochel, 2009) and their high levels of crime, such as murder (Table 3-1) have roots that extend into the twin-island nation’s colonial history. Historically, Trinidad and Tobago have been ruled by various European powers including the Spanish, French, and English (Wood, 1968). Trinidad was under Spanish control the longest. Tobago, however, reportedly changed hands 30 times between the French Spanish, Latvians and English (Valtonen, 1996). After being granted independence in 1962, Trinidad and Tobago became a Republic in 1976, which is currently one of the wealthiest nations in the region. The discovery of oil in the country is linked to this boom in fiduciary stability. As of December, 2013, the GDP for Trinidad and Tobago was 27.4 billion dollars (Central Bank of Trinidad and Tobago, 2014). Their financial stability, however (as is often the case for newly developed and developed countries) has been mostly concentrated on a small amount of persons who participate in higher rungs of society. Coinciding with an economic boom was the subsequent creation of economic classes and a rise in violence around the island. Recently, residents report crime and violence as the major issues of concern (Adams, 2012) and high murder rates are linked to increases in gang violence within communities surrounding the capital city, Port of Spain (Lane & Chadee, 2008; Maguire et al., 2008).

The cluster of schools from which data were collected were located in urban communities with high levels of community violence in Trinidad (Table 3-1). Two of the schools are fully sponsored and managed by the Ministry of Education. The other two are government assisted denominational schools. Most of the students who attend these schools are residents of the communities in which they are located.
Table 3-1. Murders, Woundings and Shootings by Police Division in Trinidad and Tobago 2014

<table>
<thead>
<tr>
<th>Police Division</th>
<th># Murders</th>
<th>% Murders</th>
<th># Woundings and Shootings</th>
<th>% Woundings and Shootings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port of Spain*</td>
<td>81</td>
<td>20%</td>
<td>139</td>
<td>25%</td>
</tr>
<tr>
<td>Northern</td>
<td>64</td>
<td>16%</td>
<td>64</td>
<td>11%</td>
</tr>
<tr>
<td>Western</td>
<td>57</td>
<td>14%</td>
<td>72</td>
<td>13%</td>
</tr>
<tr>
<td>Central</td>
<td>50</td>
<td>12%</td>
<td>74</td>
<td>13%</td>
</tr>
<tr>
<td>North Eastern*</td>
<td>48</td>
<td>12%</td>
<td>58</td>
<td>10%</td>
</tr>
<tr>
<td>Southern</td>
<td>39</td>
<td>10%</td>
<td>75</td>
<td>13%</td>
</tr>
<tr>
<td>Eastern</td>
<td>38</td>
<td>9%</td>
<td>33</td>
<td>6%</td>
</tr>
<tr>
<td>South Western</td>
<td>18</td>
<td>4%</td>
<td>31</td>
<td>6%</td>
</tr>
<tr>
<td>Tobago</td>
<td>8</td>
<td>2%</td>
<td>12</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>403</td>
<td>100%</td>
<td>558</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Trinidad and Tobago Police Service Website 2015
Data Collection Sites*

Ethnicity

According to the most recent census conducted in Trinidad and Tobago, the two largest ethnic groups in Trinidad and Tobago are Africans and East Indians, accounting for 34.2% and 35.4% of the total population respectively. In Trinidad where this study was conducted, 31.76% of the population were Africans, 37.01% were East Indian, 7.83% were mixed African and Indian, 15.69% were mixed other, 1.36% other and 6.22% not stated (Ministry of Planning and Sustainable Development Central Statistical Office, 2012).

Trinidad and Tobago’s racial composition is unique and often referred to as a plural society (Tsuji, 2008). The island’s former plantation economy and the demand it created for African slaves and East Indian indentured servants are credited with the rise of ethnic variation that is unlike what is common for most islands in the Caribbean.
Today, residents in primarily urbanized areas (much like the capital city of Port of Spain) remain predominantly of African descent. Descendants of East Indian Indentured laborers reside in primarily in rural areas (Clarke, 1993).

The overall living conditions for those of African descent (including, housing, and infrastructure) are poorer than in communities inhabited by persons of East Indian descent (Johnson & Kochel, 2012). Trinidad’s colonial past has had a significant impact on policing and the inter-group relationships that exist today, forming a basis upon which the interconnectedness of crime, race and the criminal justice system, as currently experienced by Trinidadians can be better understood (Johnson & Kochel, 2012). Trinidadians of African descent are disproportionately represented in homicide statistics as victims and offenders (Johnson & Kochel, 2012). This is possibly due to the longstanding relationship between socioeconomic status and criminal activity.

**Gender**

Research indicates that children respond to exposure to community violence differently according to their gender. In prior studies, girls report higher levels of PTSD than boys (Seedat et al., 2000) and are at higher risk for mental health issues when they witness or have indirect exposure to violence (Javdani et al., 2014). Males report more exposure to violence by direct victimization in the community and at school than females (Springer & Padgett, 2000). For indirect victimization (witnessing) however, there appears to be less difference in PTSD symptomatology according to gender at school and in the community (Springer & Padgett, 2000). Seedat et al. (2004), found that males and females in their sample were just as likely to meet the criteria for full PTSD and partial PTSD.
Setting and Participants

The current study used a cross-sectional survey design where data collected at one point in time was used to extract responses from students. The target sample for this study was comprised of students from a cluster of four primary schools with a total population of 585 students, located in communities within the North Eastern and Port of Spain police divisions, which both feature police station districts with some of the highest murder levels in Trinidad and Tobago (Maguire et al., 2008; Ministry of Planning Central Statistical Office, 2009). The primary schools are funded and run by staff and teachers employed by the Ministry of Education.

For the purpose of this study, the data collected was a convenience sample of students from standards one to four classes (grades two to five) of the schools, during the third term of the 2014-2015 school year. Participants in this study were between the ages of seven and 13 years who reside in communities, identified as having high levels of crime and violence. Approval for human subjects’ research was sought and received from the researcher’s University institutional review board (IRB) to conduct the study. In addition, permission was granted by the Ministry of Education Planning Division Programming Unit to conduct the study at the selected schools.

Instrumentation/Measures

Data collection for this study was conducted using a demographic questionnaire and two assessments the Child Exposure to Violence Checklist (CECV) (Martin et al., 2013) and the Child PTSD Symptom Scale (CPSS) (Foa, Johnson, Feeny & Treadwell, 2001). The demographic questionnaire assessed participants for gender, age, class/grade, ethnicity, community of residence, length of stay in community, family composition, and whether or not they have ever been victimized.
CVE was assessed by the CECV measure, while PTSD symptoms were measured the CPSS. To establish cross-cultural relevance (Ægisdóttir, Gerstein, & Çinarbaş, 2008) for the instruments selected, three teachers from Trinidad/Tobago were consulted via telephone and email to verify and adapt the items for use in the current study.

**Demographic questionnaire.** A brief demographic questionnaire (Hyatt, 2011) was administered to participants, including items for age, gender, ethnicity, grade level, length of residence in community, family composition, name of community they reside in, and whether or not they have been victimized. The community names were de-identified to maintain confidentiality. Gender refers to the participants’ self-identification as male or female. Age captured the participants’ self-reported age at the time of administration of questionnaires. Ethnicity was the participants’ self-reported ethnic background from the following five categories: African descent, East Indian descent, mixed (African and Indian), mixed (other) and other adapted from the categorization of ethnic groups from the Trinidad and Tobago 2011 Population and Housing Census Demographic Report (Ministry of Planning and Sustainable Development Central Statistical Office, 2012).

**Community Violence Exposure.** The Child’s Exposure to Community Violence (CECV) checklist is a 39-item self-report measure (Martin et al., 2013) adapted from the “Things I’ve Seen and Heard” scale by Richter and Martinez (1992). The “Things I’ve Seen and Heard” scale was a 20-item self-report measure, coded on a five-point Likert scale that examined exposure to community violence. Community Violence Exposure (CVE) describes the students’ self-reported means of experiencing violence within the
community within which the participants reside including, hearing, witnessing and experiencing/direct victimization. Hearing (CVE_H) is students’ self-reported CVE that involves hearing violent events that have occurred in the community within which they reside. Witnessing (CVE_W) is students’ self-reported CVE characterized by seeing a violent incident within the community within which they reside. Direct Victimization (CVE_{DV}) captures students’ self-reported CVE that involves or being directly victimized by an act of violence within the community where they reside.

This measure has good internal reliability with a Cronbach’s alpha of 0.81. Thompson, Proctor, Weisbart, Lewis, English, Hussey, and Runyan (2007) reported that younger children, age 6, might have some trouble interpreting the meaning of some items in the scale.

The CECV was adapted for the purpose of this study, using 30 of the items concerning CVE, through witnessing, hearing and experiencing through direct victimization. Nine of the items were excluded as they pertained to domestic violence or sexual abuse. The responses on a five-point Likert scale ranged from “0” (never or don’t know) to “4” (more than ten times) (Martin, 2012).

**Traumatic Impact/PTSD Symptoms.** Traumatic Impact/PTSD Symptoms was measured using students’ scores from symptom severity scale from the Child PTSD Symptom Scale (CPSS). (Foa, 2001) that met the clinical cutoff for diagnosing PTSD. The Child CPSS is a 24-item scale developed by Foa et al. (2001) to measure PTSD symptoms experienced within the past two weeks. The CPSS assessed for symptom severity through the use of a four-point Likert type scale that ranges from 0 to 3 with the options, 0 = “not at all or only one at a time,” 1 = “once a week or less/once in a while,”
2 = “2 to 4 times a week/ half the time,” and 3 = “5 or more times a week/almost always”, for the first 17 items. This first section was used to assess for traumatic impact/PTSD symptoms for this study. The last seven questions, scored dichotomously as absent (0) or present (1), assessing functional impairment with scores ranging from 0 to 7. This scale is designed for use with children between the ages of eight and eighteen. The CPSS internal consistency ranged from .70 to .89 for the total and subscale symptom scores. Test-retest reliability coefficients were moderate to excellent, with .84 for the total score, .63 for avoidance, .85 for re-experiencing, and .76 for arousal. Foa et al. (2001) examined convergent validity by comparing the CPSS with the Child Posttraumatic Stress Reaction Index (CPTSD-RI), with a Pearson product-moment correlation coefficient of .80 (p < .001).

Data Collection/Procedures

In cooperation with the principal, school social worker and teachers of the standards one, two, three and four classes of all the schools, informed consent forms were sent to parents to obtain permission for student participation. After signed parental consent forms were returned, appropriate dates and times were scheduled for the administration of the questionnaire.

Prior to the administration of the instruments, verbal assent was sought from the students. Of the approximately 400 informed consent forms distributed to invite parents to allow their children to participate in the survey, 78 were returned. The questionnaire was subsequently administered to a total of 51 students from the cluster of four schools at different times in each of the schools. To achieve a power of .80, a significance level of alpha = .05, and a correlation of .4, a minimum sample size of 46 respondents was needed.
A third year undergraduate student from a local university was trained to assist the researcher with the administration of the instrument. The researcher read the questionnaire instructions and each of the questions were aloud, while the students recorded their responses on the printed questionnaires provided. Each administration of the survey took an average of one hour for the children to complete. The questionnaire was administered in June and July, in 2015.

**Methodological Strengths and Limitations**

Using correlations for analysis provides the benefit of observing relationships between variables without the manipulation of the researcher. While using a cross-sectional design provides the benefit of observing the relationships among the variables without manipulation, it involves the researcher collecting data at one point in time, rather than multiple and observations over a period of time. However correlation between two variables does not equal causality, therefore no causal conclusions can be drawn about the relationship.

**Data Analysis**

SPSSv.22 was used for data management and SAS 9.4 for data analysis. Descriptive statistics were reported for the demographic (age, gender, ethnic background), independent and dependent variables. Multiple regression analyses were used to examine the relationships between the dependent variable, PTSD symptoms, and the independent variables hearing, witnessing and direct victimization (CVE). Mean imputation was used to handle missing data (Gelman & Hill, 2007).

Linear regressions were performed to examine the relationship between PTSD symptoms and each of the predictor variables (hearing, witnessing and direct
victimization) individually. The linear regression equations used for the corresponding relationships are as follows:

- PTSD symptoms and hearing, \( Y(\text{PTSD}) = B_0 + B_1 \times \text{Hearing} \),
- PTSD symptoms and witnessing, \( Y(\text{PTSD}) = B_0 + B_2 \times \text{Witnessing} \), and
- PTSD symptoms and direct victimization \( Y(\text{PTSD}) = B_0 + B_3 \times \text{Direct Victimization} \).

Multiple linear regression analysis was used to examine the relationships between the dependent variable traumatic impact/PTSD symptoms and the predictor variables hearing, witnessing and direct victimization. The following equation was used:

\( Y(\text{PTSD}) = B_0 + B_1 \times \text{Hearing} + B_2 \times \text{Witnessing} + B_3 \times \text{Direct Victimization} \). Multiple linear regression analysis was also used to look at the relationships between PTSD symptoms and the predictor variables hearing, witnessing and direct victimization when controlling for the demographic variables, ethnicity, age and gender. This equation depicts this relationship: \( Y(\text{PTSD}) = B_0 + B_1 \times \text{Hearing} + B_2 \times \text{Witnessing} + B_3 \times \text{Direct Victimization} + B_4 \times \text{Gender} + B_5 \times \text{Age} + B_6 \times \text{Ethnicity} \).
CHAPTER 4
RESULTS

This chapter reports the findings from the analysis of the data collected as they relate to the research questions of this study. First, descriptive statistics are reported for the demographic and independent and dependent variables. Then, results of multiple regression analyses are reported. This is followed by a multiple regression analysis of the dependent variable and all the independent variables, controlling for the demographic variables age, gender and ethnicity.

Some of the items on the questionnaires were unanswered and left the data set with missing values. To address missing data, mean imputation was used prior to conducting the correlational and multiple regression analyses. This approach to dealing with missing data attempts to retain data by replacing each missing value with the mean of the existing data for that item (Gelman & Hill, 2007). There were no missing values for the demographic data collected. There were no missing values for the items measuring hearing about community violence. For items related to witnessing community violence, 71% were completed with 29% missing (9 items were missing 1 value and 1 item was missing 6 values. Direct victimization had a 92% response to the items measuring it, with 3 items missing one value and 1 item missing three values. For PTSD, 98% of the items were completed with only 2% missing. Table 4-1 includes the frequencies of responses for the CVE variables.

Descriptive Information

Participants. The sample \((n = 51)\) recruited for this study consisted of students aged 7 to 13 years of age. Of the sample of students, 56.9% \((n = 29)\) were males and 43.1% \((n = 22)\) were females. Thirty three percent \((n = 17)\) of the participants were from
standard 1 (grade 2) classes, 19.6\% (n = 10) from standard 2 (grade 3), 31.4\% (n = 16) standard 3 (grade 4), 13.7\% (n = 7) standard 4 (grade 5) and 2\% (n = 1) from standard 5 (grade 6). Students’ self-identified ethnic background was: 56.9\% (n = 29) African descent, 5.9\% (n = 3) East Indian, 19.6 (n = 10) Mixed African/Indian, 11.8 (n = 6) Mixed other, and 5.9\% (n = 3) other (Table 4-2). Even with missing data, more than half, 55\% (n=28), of the students met the cutoff score that is a requirement for a diagnosis of PTSD.

**Age, (CVE) and PTSD.** The most common form of CVE experienced in this sample was hearing ($M = 2.94, SD = 1.08$), followed by witnessing ($M = 1.01, SD = 0.75$), then direct victimization ($M = 0.56, SD = 0.67$). The mean score for PTSD (17.94) was higher than the clinical cutoff score for a diagnosis of PTSD. The mean age for this sample was 9.2 and most of the students (25.5\%) were 10 years of age (Table 4-2). Descriptive statistics for age are presented in Table 4-3.

**Gender, CVE, and PTSD.** Male students participants experienced higher levels of exposure to community violence through hearing (Male: $M = 3.12, SD = 0.99$; Female: $M = 2.70, SD = 1.17$), witnessing (Male: $M = 1.12, SD = .81$; Female $M = 0.88, SD = 0.64$) and direct victimization (Male: $M = 0.63, SD = 0.73$; Female: $M = 0.47, SD = 0.58$) (Table 4-3). Females experienced higher levels of PTSD symptoms ($M = 20.13, SD = 15.00$) than males ($M = 16.29, SD = 13.72$). Table 4-4.

**Ethnicity, CVE, and PTSD.** In terms of ethnicity, students of African descent accounted for more than half (59\%) of the sample and experienced the most exposure to direct victimization ($M = 0.70$) as compared to East Indian ($M = 0.24$), Mixed (African and Indian) ($M = 0.44$), Mixed (Other) ($M = 0.40$) and Other $M = 0.29$. Students of
African descent also experienced the most CVE through hearing ($M = 3.19$), followed by Other ($M = 2.83$), Mixed (Other) ($M = 2.75$), East Indian ($M = 2.67$), and Mixed (African and Indian) ($M = 2.45$). Students of Mixed (Other) ethnicity, the third largest ethnic groups in the sample (11.8%) experienced the highest level of PTSD symptoms ($M = 20.33$), in comparison to African ($M = 19.9$), East Indian ($M = 0.15$), Other $M = 13.75$), and Mixed (African and Indian) ($M = 12.99$). (Table 4-5).

**CVE through Hearing and PTSD Symptoms**

Research Question 1: What is the relationship between hearing CV and the level of traumatic impact/PTSD symptoms?

The results of the linear regression analyzing the relationship between PTSD symptoms and CVE through hearing showed that CVE through hearing was a significant predictor of PTSD ($B = 4.77$, $R^2 = .1302$, $p < .01$) (Table 4-6) for results of regression analyses examining the relationship between CVE through hearing, witnessing, and direct victimization.

**CVE through Witnessing and PTSD Symptoms**

Research Question 2: What is the relationship between witnessing CV and the level of traumatic impact/PTSD symptoms?  The linear regression analysis found that experiencing CVE through witnessing to be a significant predictor ($B = 8.17$, $R^2 = .182$, $p < .01$) for PTSD symptoms (Table 4-6).

**CVE through Direct Victimization and PTSD Symptoms**

Research Question 3: What is the relationship between experiencing CVE through direct victimization and traumatic impact/PTSD symptoms? The regression analysis of the relationship between experiencing CV through direct victimization and
PTSD symptoms was a significantly predictive one ($B = 13.17, R^2 = .378, p < .001$) (Table 4-6).

**CVE (Hearing, Witnessing and Direct Victimization) and PTSD Symptoms**

Research Question 4: What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and the traumatic impact/PTSD symptoms? When the three CVE predictor variables are entered into a multiple regression model, with PTSD symptoms as the dependent variable, direct victimization ($B = 11.38, R^2 = .0399, p < .001$) was found to be the single significant predictor of PTSD symptoms (Table 4-6).

**CVE (Hearing, Witnessing and Direct Victimization) and PTSD Symptoms when controlling for Gender, Age and Ethnicity**

Research Question 5: What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and traumatic impact/PTSD symptoms when controlling for gender, age, and ethnicity?

The three CVE predictor variables, hearing, witnessing and direct victimization were entered into the model along with three demographic control variables gender, age and ethnicity, with the dependent variable PTSD symptoms. With all variables entered into the regression, only direct victimization ($B = 11.07, R^2 = .48, p = .0009$) and gender ($B = -8.22, R^2 = .48, p = .0291$) showed a significant relationship to PTSD symptoms (Table 4-7). Female participants were more likely to have higher PTSD symptom scores than males.

Linear regression analyses found CVE through hearing, witnessing and direct victimization to be significant predictors of PTSD symptoms. Direct victimization was found to be a significant predictor of PTSD symptoms when controlling for hearing and
witnessing. When controlling for age, gender and ethnic background, multiple linear regression analysis showed only direct victimization and gender were found to be significant. Correlations between PTSD symptoms and all the predictor variables were found to be significant. The results of this study provide preliminary evidence for a relationship between the traumatic impact of CVE through hearing, witnessing and direct victimization and PTSD symptoms.
Table 4-1. Frequency of missing data for community violence and PTSD

<table>
<thead>
<tr>
<th>Missing Hearing</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
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<table>
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<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<td>36</td>
<td>70.59</td>
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<td>3</td>
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<td>94.12</td>
</tr>
<tr>
<td>4</td>
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<td>50</td>
<td>98.04</td>
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<tr>
<td>6</td>
<td>1</td>
<td>1.96</td>
<td>51</td>
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<table>
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<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
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<td>98.04</td>
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Table 4-2. Frequencies for demographic variables

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</tr>
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</tr>
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<td>13.7</td>
</tr>
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<tr>
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</tr>
<tr>
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<td>5.9</td>
</tr>
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<td>19.6</td>
</tr>
<tr>
<td>Mixed other</td>
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<td>11.8</td>
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### Table 4-3. Descriptive statistics for age, community violence exposure and PTSD

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<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
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</thead>
<tbody>
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<td>Age</td>
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<td>9.21569</td>
<td>1.34631</td>
<td>9.00000</td>
<td>7.00000</td>
<td>13.00000</td>
</tr>
<tr>
<td>Hearing</td>
<td>51</td>
<td>2.94118</td>
<td>1.08003</td>
<td>3.00000</td>
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<td>4.00000</td>
</tr>
<tr>
<td>Witnessing</td>
<td>51</td>
<td>1.01396</td>
<td>0.74613</td>
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<tr>
<td>Victimization</td>
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<td>PTSD</td>
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### Table 4-4. Descriptive statistics for gender, community violence exposure and PTSD

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<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
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<td>Hearing</td>
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</tr>
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<td>Witnessing</td>
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<tr>
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<td>Direct Victimization</td>
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### Table 4-5. Descriptive statistics for ethnicity, community violence exposure and PTSD

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<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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</thead>
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Table 4-6. Results of Regression Analysis of the Relationship between Community Violence Exposure (CVE) and PTSD symptoms

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<th>SE</th>
<th>p-value</th>
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Table 4-7. Results of Multiple Regression Analysis of the Relationship between Community Violence Exposure and PTSD symptoms as controlled by Demographic variables

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CHAPTER 5
DISCUSSION

According to the World Health Organization (WHO) (2002), violence is an exertion of physical force with intent that results in either actual or a higher likelihood of physical or psychological injury. Community violence is an area of growing concern as it is the public perpetration of violence against a community or group of people through economic, social or political (in)actions (Bowen & Brown, 2008). Above and beyond its deployment for political gain, international research on community violence is beginning to outline the ways that economic and social structures play a greater part in deciding the levels of exposure to violence that children face (Haj-Yahia, Leshem & Guterman, 2011). The purpose of this chapter is to discuss this study’s findings as well as the contributions they make to literature concerning the traumatic impact of community violence exposure on primary school children living in Trinidad. Theoretical implications, practice implications, limitations, research implications and future directions will also be discussed.

Overview of Findings

The results of this study indicated that experiencing community violence through hearing, witnessing and direct victimization had a significant traumatic impact on a sample of primary school students living in communities with high levels of community violence in Trinidad. CVE through hearing, witnessing and direct victimization were all positively and significantly correlated with PTSD symptoms. However, when all variables were considered, only direct victimization was found to be a significant predictor of PTSD symptoms. Also when controlling for age, gender and ethnicity in the model, only direct victimization and gender were significant predictors of PTSD.
symptoms. The results of this study provide preliminary evidence for confirming the traumatic impact of CVE through hearing, witnessing and direct victimization as manifested in PTSD symptoms in the children of Trinidad.

**CVE through Hearing and PTSD Symptoms**

Research Question 1: What is the relationship between hearing CV and the level of traumatic impact/PTSD symptoms?

PTSD symptoms and hearing CVE shared a significant relationship, with hearing being a significant predictor of PTSD symptoms in the primary school children in Trinidad. These findings are consistent with the Scarpa et al. (2006) study that found hearing about violence significantly influenced the levels of PTSD among a sample of college students. Fowler et al. (2009) also found hearing to be a predictor of PTSD symptoms in children along with witnessing and (direct) victimization. This finding emphasizes the traumatic effects that experiencing CVE can have on children via simply hearing about it. Therefore, the finding that it has a significant impact on children’s trauma symptoms must not be ignored.

**CVE through Witnessing and PTSD Symptoms**

Research Question 2: What is the relationship between witnessing CV and the level of traumatic impact/PTSD symptoms?

Witnessing CV had a significant moderate positive relationship with children’s’ PTSD symptoms in this current study. This finding is consistent with findings from Seedat et al. (2004), a study conducted in South Africa, which revealed that witnessing family members being injured, beaten, hurt or killed and witnessing violence in the street neighborhood or school were independently predictive of a PTSD symptom diagnosis. Prior research has shown that witnessing community violence is the most
common form of exposure to violence among children (Haj-Yahia et al., 2011; Seedat et al., 2000; Seedat et al., 2004; Martin et al., 2013). In this current study however, hearing was the most common form of exposure to community violence experienced, followed by witnessing and direct victimization respectively. Hearing about community violence seems to be the easiest means of being exposed to violence within the community setting.

**CVE through Direct Victimization and PTSD Symptoms**

Research Question 3: What is the relationship between experiencing CVE through direct victimization and traumatic impact/PTSD symptoms?

Consistent with findings from previous research (Paxton et al., 2004), CVE through direct victimization was shown to be a significantly related to PTSD symptoms in students living in communities with high levels of community violence in Trinidad. Similar to the current study, most of the literature examining the relationship between CVE and PTSD, witnessing and other means of CVE, are often studied along with direct victimization (Fowler et al., 2009; Paxton et al., 2004). When paired with witnessing, direct victimization is often found to be a more powerful predictor of PTSD symptoms in children (Fowler et al., 2009; Paxton et al., 2004), and has been distinguished from other ways of experiencing community violence (Martin et al., 2013). This supports the findings of the present study.

While this current study focused on non-family violence, directly experiencing and witnessing family violence and threats of physical harm has been conceptualized as a form of direct victimization (Martin et al., 2013). The instrument used in the current study (CECV), evaluated community violence external to the home only, thus PTSD
symptoms linked to direct victimization by a family member is not accounted for in these results.

In a prior study, adolescents with reported high levels of delinquency, and higher levels of direct victimization were linked to higher levels of PTSD (Wood et al., 2002). This trend was reflected in this current study with younger children, as higher levels of direct victimization among primary school students significantly predicted higher levels of PTSD symptoms. This finding has implications for the assessment and treatment of students who are exposed to violence in communities and suffer with traumatic symptoms.

**CVE (Hearing, Witnessing and Direct Victimization) and PTSD Symptoms**

Research Question 4: What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and the traumatic impact of PTSD symptoms?

Direct victimization is often distinguished from witnessing and hearing, by having a more adverse impact on individuals (Margolin et al., 2000). Findings of the current study similarly found direct victimization to be the only significant predictor of PTSD symptoms when all three CVE predictor variables were examined. This is consistent with prior research that reported physical or direct victimization as a predictor of PTSD symptoms over and above other forms of exposure to violence (Guterman et al., 2003). This finding, however, differs from the meta-analysis conducted by Fowler et al. (2009) on the effect of community violence on mental health outcomes. Fowler et al. found that victimization was a significant predictor for both internalizing and externalizing symptoms, but not PTSD symptoms.
CVE (Hearing, Witnessing and Direct Victimization) and PTSD Symptoms when controlling Gender, Age and Ethnicity

Research Question 5: What is the relationship between experiencing CVE through hearing, witnessing, and direct victimization and traumatic impact/PTSD symptoms when controlling gender, age, and ethnicity?

When all the relationships between hearing, witnessing, and direct victimization and PTSD were examined, and the demographic variables gender, age and ethnicity were controlled for, gender and direct victimization were revealed to be significant. Similar to the findings above, and previous studies (Guterman et al., 2003; Margolin et al., 2000) the impact of direct victimization on PTSD symptoms overshadowed that of the other predictor variables in the model.

Gender was also a significant predictor of PTSD, when controlling for all the other variables in the model. Several studies highlight the relationship between gender and PTSD symptoms in the aftermath of exposure to community violence (Haj-Yahia et al., 2011; Seedat et al., 2000; Springer & Padgett, 2000). For example, in their sample of Arab youth, Haj-Yahia et al., found that boys and were more likely to witness and experience (victimization) community violence than girls (Haj-Yahia et al., 2011). The findings of Haj-Yahia et al. are similar to the results from this current study because boys experienced higher levels of exposure to CVE through hearing, witnessing and direct victimization than girls in both studies.

According to Seedat et al. (2000), girls experienced higher levels of PTSD symptomatology after being exposed to CV, than boys. This was consistent with the findings of the present study where girls experienced greater levels of PTSD symptoms. Additionally, gender was the only control variable that was significant predictor of PTSD,
indicating that girls were significantly more likely to experience PTSD symptoms when exposed to CVE for this sample of Trinidadian children.

**Study Implications**

The majority of the students in this sample met clinical requirements for a diagnosis of PTSD. Girls had higher levels of PTSD than boys even though boys were exposed to more CV. The findings indicate that there is a significant relationship between community violence exposure and PTSD in this sample of primary school students in Trinidad. As expected, CVE has an inimical influence on the mental health of primary school children in Trinidad as manifested through PTSD symptoms. Students who hear, witness, and are direct victims of acts of violence within their community are affected by these traumatic day-to-day experiences. These findings are consistent with previous research exploring community violence exposure and PTSD symptomatology in children (Martin et al., 2013), which has important implications for research, theory, practitioners and local officials in Trinidad.

**Research and Theory Implications**

While studies from the United States have shown that exposure to community violence can have negative psychological and emotional impacts on the wellbeing of elementary school age children (Brown, 2005; Wood, Foy, Layne, Pynoos & James, 2002), little has been done in the way of researching community violence with contextually relevant designs and knowledge bases. Though the current study indicates some basic information about the level of CVE and PTSD in Trinidadian children, future research should include more study of structural violence and the role that serious crimes and gang-related criminal activity play in shaping disadvantaged communities in Trinidad (Cain, 1996; Maguire, Willis, Snipes & Gantley, 2008). The findings of this and
many other prior studies are limited in explaining the extent of trauma in these communities, particularly in the lives of children as it relates to the manifestation of trauma, secondary trauma and other long-term emotional consequences (Dulmus, 2003).

In the current study, the ecological transactional model provided a lens through which to examine the interaction between CVE within the neighborhood (in the exosystemic context) and the ontogenic development of children (Overstreet & Mazza, 2003). Future research should include examination of the interactions and transactions between factors within ecological contexts (e.g. the family and social support) that build resilience among children in violent communities. Social support has been assessed for its role as a moderator for the deleterious effects of exposure to community violence (Haden & Scarpa, 2008; Hammack, Richards, Luo, Edlynn & Roy, 2004; Jones, 2007; Kaynak, Lepore & Kliewer, 2011; Scarpa & Haden, 2006). Social support within the microsystem child will form a protective barrier or buffer that allows youth to develop resilience in the midst of the negative aftermath of community violence exposure (Aisenberg & Ell 2005; Aisenberg & Herrenkohl, 2008; Hammack et al., 2004; Proctor, 2006).

Qualitative methodology and analysis should be considered for future investigations related to community violence and trauma symptoms in children in Trinidad and Tobago. This exploration would provide a more nuanced and contextual examination of this issue to provide a deeper understanding (Creswell, 2013) of an important mental health concern for young people. In the researcher’s anecdotal interactions with the principals, teachers, office staff and students at these schools,
contextual information about the communities and school of the students studied was unearthed; however, interpretation of these related qualitative findings was beyond the research design, scope and the methodology that IRB approval provided for this study.

The rise in unstable economic conditions and subsequent surge in crime is an occurrence seen throughout the Caribbean. Many researchers have called for further theory development that incorporates criminology (Hyatt, 2011) and reflects the distinctive cultural aspects of the region (Deosaran, 2008). Subsequent studies can build upon the usefulness of such prior works, as the impact of crime on today’s children and future adult populations is salient for more than just western societies. To that end, longitudinal studies are needed that follow how exposure to and involvement in different types of community violence can differentially impact individuals from early stages in childhood through adulthood (Shields et al., 2009).

School violence in Trinidad would be a particular area of interest due to the expressed concerns by representatives in the government and local school officials shared during the researcher’s work on the island. Shields et al. (2009) found, for example, that victimization in schools was more strongly correlated with symptoms of distress than victimization within the neighborhood. Studies, however, examining the situational impact of CVE on children in schools and neighborhoods in Trinidad had not yet been conducted.

**Counseling Practice Implications**

The present study suggests some preliminary practice implications for addressing the needs of children exposed to community violence. Hearing, witnessing and direct victimization were means by which children may be exposed to community violence in Trinidad and subsequently develop PTSD symptoms. Though direct
victimization has been shown to have a more significant impact on PTSD, there needs to also be an increased awareness of the effects that just living in violent neighborhood has on children and their development (Margolin & Gordis, 2000). An increase in gang-related criminal activity in some Trinidadian communities increases the opportunities for children to be exposed to these traumatic experiences, and therefore mental health practitioners in schools and communities need to be aware of these potential negative effects and appropriately equipped for preventative and comprehensive strategies for intervention.

Preventive interventions should be considered as they have been used to help children and youth affected by the traumatic effects of exposure to urban violence (Banks, Hogue, Timberlake, & Liddle, 1996). These interventions are implemented before the initial onset of a disorder with the aim of preventing the development of a mental disorder induced by exposure to community violence. Interventions can be categorized into three areas: universal, selective and indicated. Universal interventions are developed for a population group or the general public. Selective preventive interventions focus on subgroups or individuals assessed as being more likely to develop a mental disorder. Indicated preventive interventions target high-risk persons who do not meet the diagnostic requirements for a mental disorder, yet display minimal indicators or characteristics for a mental disorder or have a physiological characteristic that may indicate a predisposition for mental health problems (Dulmus, 2003). Two preventive interventions – one Afrocentric and the other culturally relevant, based on social skills training (SST) curricula, were found to be effective in helping to reduce
anger and employing the use of calmer controlled behaviors in challenging social situations (Banks et al., 1996).

Considering the fact that CVE through direct victimization is a predictor for PTSD symptoms, interventions should be provided specifically targeting children who have been victimized by community violence. Psychoeducational programs have also been used to help youth exposed to community and family violence. The Sanctuary Model is a psychoeducational program that used the trauma recovery framework to help youth in a residential treatment program to change non-adaptive behavioral and cognitive patterns used to cope with traumatic experiences (Rivard et al., 2004).

Gender was also an indicator of higher levels of PTSD symptoms in the current study, with girls experiencing higher levels of PTSD symptoms than boys. Research has provided valuable information on the interventions used to help children exposed to community violence. The major types of trauma-focused treatments used to treat traumatized children include: Psychological debriefing, psycho-education, trauma-specific cognitive behavioral treatments (CBT), psychotropic medication, psychodynamic and eclectic therapies (Cohen et al., 2000). CBT has been empirically proven to be effective in treating PTSD in children (Brown, 2005; Cohen et al., 2000).

Therapeutic interventions should be made available within the various ecological levels of the society within which children live. Community-based, school-based, family and individual counseling interventions and services should be made available for children in high crime communities. These recommended services and interventions are matched with the ecological levels within which children develop.
**Family-based Interventions.** Family-based interventions implemented within the child’s microsystem, have been used to reduce the negative effects associated with exposure to community violence among urban youth. Programs like the SURVIVE multifamily group intervention, aimed at addressing the negative effects of exposure to both family and community violence through collaboration with community members, parents, mental health professionals, teachers and an interdisciplinary team of researchers (Devoe, Dean, Traube & McKay, 2005).

**School-based Interventions.** School-based interventions affecting children from the microsystem have been found to be effective in helping children deal with the psychological trauma associated with chronic exposure to urban violence (Ceballo, 2000; Ceballo et al., 2006).

Considering the impact of school-based interventions, school mental health professionals should trained and encouraged to use evidenced based trauma interventions within schools located in high crime communities. They can implement interventions such as the ‘neighborhood club’, a short-term, school-based supportive group intervention designed for elementary school children, which was found to have a calming effect on students troubled by the chronic exposure to urban violence (Ceballo, 2000; Ceballo et al., 2006). School mental health professionals can also try the school-based early intervention and psychological first aid program, which includes community leaders, parents, family member, teachers and parents (Pynoos & Nader, 1988). Use of school-based trauma and grief-focused interventions for children exposed to community violence has been associated with improvement in academic performance (GPA) posttraumatic stress symptoms and complicated grief symptoms (Saltzman, Pynoos,
Layne, Steinberg & Aisenberg, 2001). Other school-based measures that can provide additional support for the needs of students exposed to community violence is to have additional mental health professional assigned to schools in communities with high levels of crime.

**Trauma-Informed Approach.** Schools should also be transformed into trauma-informed environments where they provide trauma informed care. According to Substance Abuse and Mental Health Services Administration (SAMHSA) the trauma informed-approach to providing behavioral health service involves,

An understanding of trauma and an awareness of the impact it can have across settings, services, and populations. It involves viewing trauma through an ecological and cultural lens and recognizing that context plays a significant role in how individuals perceive and process traumatic events, whether acute or chronic (p. xix, 2014).

According to SEDNET the Multiagency Network for Students with Emotional/Behavioral Disabilities, trauma-informed school environments have specific characteristics. They make safe and predictable environments available to students that are responsive to transitions and sensory needs of students.

**Community based interventions.** Community based interventions like community violence is located in the exosystem of the child’s ecology. Community level interventions can be developed to meet the needs of children exposed to community violence. This was done through a multilevel community mobilization intervention based on the social-ecology model designed to address the needs of young people at the individual, family, block, organizational and built environment levels has also been
used to provide a safety net of services for young people described as “at-risk” or returning from jail/prison (Hernandez-Cordero, Trinidad & Link, 2011). In collaboration with non-governmental organizations (NGOs) and government sponsored community organizations and initiatives can increase awareness about the effects of trauma and building resilience in communities through trauma informed care.

Additionally, the number of mental health professionals for schools in communities with high crime levels should be increased, so that more care can be provided for children who may have suffered trauma. These practitioners are key resources in identifying students who may be in need of services. They should be trained to provide trauma-informed interventions to students who are victims of community violence. They must also be aware that girls are more vulnerable to the traumatic impact of community violence than boys. These practitioners are also equipped to meet the needs of this vulnerable population in a setting that is optimally positioned in the community wherein the child lives.

**Policy Makers and Government Officials in Trinidad and Tobago**

Government officials, concerned with developing policies, authorizing and funding programs and initiatives in schools and communities need to be aware of the traumatic impact that CVE has on children in communities with high levels of crime and violence. This study showed that just hearing and witnessing community violence had a traumatic impact on children. With experiencing violence in the community through direct victimization having a significant relationship with the onset of PTSD symptoms. Education policy makers can consider implementing a trauma-informed approach to include, teachers, school mental health practitioners and staff to create a trauma-
informed school environment. In such environments, students dealing with the negative mental health effects of trauma exposure can be supported.

Those who are responsible for community development programs need to see the need for the development and implementation of the interventions to address the traumatic effects of community violence specifically. Within the education sector, mental health professionals need to be more available to schools in communities where children are more vulnerable to the inimical impact of exposure to community violence. The four schools in this sample shared a single school social worker available to them one day per week to meet the demands of this sample of children where the majority met the requirements for a clinical diagnosis of PTSD. In addition to the four schools in this sample the school social worker had responsibilities at other schools on a bi-monthly basis. Assigning more school mental health professionals to schools in communities with high levels of crime and violence can provide additional support for those who need more individualized attention.

**Limitations**

This study provided results to inform future research, theory development and practice implications. These findings and implications should be interpreted within context of the limitations to the study.

While the data collected allowed for the analysis of the three community violence exposure variables in relation to PTSD yielded a significant results, the sample size (n = 51) restricts the ability to generalize to the general populations. The convenience sampling design also did not allow the researcher to gather a large amount of variation related to CVE within the students, which also undermined generalizability.
Another limitation is related to the methods chosen for this study. Multiple regression allows only for correlational analysis of trends. This hinders a researcher’s ability to speak definitively concerning the possible causal links, regardless of the strength of the relationships observed. Because more rigorous analyses that would allow for causal inferences are not always possible, the addition of qualitative data could have substantially strengthened the interpretation of the findings.

To this end, the cross-sectional design of the study does not allow for analysis of the long-term effects of community violence exposure and the possible implications for evidence of resilience. As earlier stated, the nature of quantitative analysis also lends to examining the dominating negative impact and ignores the students who while exposed to community violence may have resources that allow them to ameliorate the traumatic impact. Adding a qualitative component may reveal more nuanced insights into the resilience factors in students who do not manifest PTSD symptoms in the aftermath of exposure to CV. Some students failed to provide responses for all the questions on the survey, resulting in missing items in the data set.

**Summary and Conclusions**

This chapter presented an overview of the study, a summary of the findings, discussion of findings, research and theory implications, practice implications, policy implications, and limitations. The traumatic impact of community violence exposure on primary school children in Trinidad and Tobago was identified as an issue for concern and was examined in this study. The findings indicate that experiencing CVE by hearing, witnessing and victimization were all significant predictors of PTSD symptoms in primary school children, with direct victimization and gender having the most powerful
impact. Most of the students in the sample meeting the clinical cut off on the symptom severity scale to indicate a diagnosis of PTSD.

This study extends the scholarship on the effect of CVE on PTSD symptoms in children in the Caribbean. Future research is needed on the effects of structural violence and the impact of gang violence and criminal activity is having on the disadvantaged communities in Trinidad (Cain, 1996; Maguire et al., 2008). The possible, buffering effects of social supports within the microsystem of the child can also be explored. The use of qualitative methodology to this topic was also proposed, to provide more nuanced insights to the body of knowledge on this issue. Longitudinal research is also needed to follow the lifetime effects of CVE, in addition to an exploration of school violence as it relates to exposure to violence within communities.

To provide support for children affected by CVE, mental health practitioners need to be able to accurately assess students displaying PTSD symptoms. School-based, family-based, community-based, and preventive interventions can be considered to provide support for traumatized children. Psychoeducational programs along with an overall trauma-informed approach can provide support for traumatized children who are dealing with PTSD symptoms. Some of these symptoms may be misinterpreted and draw negative attention and consequences to the child, where therapeutic interventions are needed. Policy makers have a role to play in developing policies and providing support for programs and interventions that would support the development of children who have been traumatized by CVE. The trauma informed approach which was recommended for schools, should also be adopted by policy makers and government officials, so that they can be sensitized to the needs of children within high crime
communities who are exposed to the traumatic effects of exposure to CVE as manifested in PTSD symptoms.

According to Robert Meehan (2015), "Every ounce of effort we put into our children today will someday be measured and accounted for in our children's futures.” Even though this study focused on traumatic impact of CVE on a sample of students from communities with high levels of community violence, the entire country is affected at the macrosystemic level. It is essential that those who are empowered with the means, and opportunities to improve the fortunes of the primary school students who have been affected by CVE do so, through the evidence based interventions that are available to assist these children.
**Title of Protocol:** The Traumatic Impact of Community Violence Exposure in Trinidad

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**Co-Investigator(s):**

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### Dates of Proposed Research:
April to June 2015

### Source of Funding

| None |

### Describe the Scientific Purpose of the Study:
The purpose of this study is to examine the relationship between community violence exposure and traumatic stress symptoms among primary (elementary) school children that live in communities with high levels of police-reported violent crimes in Trinidad and Tobago. For the purpose of this study data will be collected using a demographic questionnaire and two child assessments, the Child's Exposure to Community...
Violence (CECV) checklist will be used to measure community violence exposure and the Child PTSD Symptom Scale (CPSS) will be used to assess PTSD symptoms.

The Child’s Exposure to Community Violence (CECV) checklist was used as a 39-item self-report measure in Martin, Revington & Seedat, (2012) study “The 39-Item Child Exposure to Community Violence Scale”. In this study the CECV was adapted from the “Things I’ve Seen and Heard” scale by Richter and Martinez (1992). The “Things I’ve Seen and Heard” scale was a 20-item self-report measure, coded on a five point Likert scale that examined exposure to community violence. For the purpose of this study, the CECV was adapted, keeping 30 of the items concerning community violence exposure (CVE), through witnessing, hearing and experiencing through direct victimization. Nine of the items were excluded as they pertained to domestic violence or sexual abuse.

The Child PTSD Symptom Scale (CPSS) is a 24-item scale developed by Edna B. Foa (Foa, Johnson, Feeny & Treadwell, 2001) that measures the presence of PTSD symptoms experienced within the past two weeks. Gudiño and Rindlaub (2014), used this instrument in their study “Psychometric Properties of the Child PTSD Symptom Scale in Latino Children” to assess PTSD symptoms in Latino children at high risk of exposure to community violence. The results of the CPSS were found to be positively correlated to with violence exposure. Sloan-Power, Boxer, McGuirl and Church (2013) used the CPSS in their study “Coping Zone Construction and Mapping: An Exploratory Study of Contextual Coping, PTSD, and Childhood Violence Exposure in Urban Areas.” Using a mixed-method approach this study examined urban children’s ability to cope with multicontextual violence exposure simultaneously and what they did when faced with this exposure over time.

**Describe the Research Methodology in Non-Technical Language:** *(Explain what will be done with or to the research participant.)*

The researcher will submit an application to the Ministry of Education in Trinidad and Tobago to gain permission to conduct research in Trinidad schools. After gaining this approval, and with the cooperation of the principal and teachers in a cluster of four primary schools in the North Eastern and Port of Spain Police Divisions, data will be collected from schools in communities with high homicide rates in Trinidad and Tobago. Parental consent letters will be sent to a convenience sample of approximately 345 students from the standards one to four classes (grades two to five) of each school, during the third term (April to June) 2015. A survey consisting of a demographic questionnaire and two child assessments, the Child Exposure to Community Violence checklist (CECV) and the Child PTSD Symptom Scale (CPSS) will then be administered.

The questionnaire will be administered to the students in groups by the researcher and her research assistant/s. To maintain privacy each questionnaire will be provided with a cover sheet and students will be spaced out sufficiently so that they can’t see each other’s responses. They will not be required to include any identifying information on their questionnaire.
The questions on the survey will be read aloud, verbatim to the group of students one at a time, allowing each student enough time to complete the question on their own. They will be allowed to ask for clarifications regarding the definition of terms or any other queries about the questionnaire.

The children who choose not to participate will stay in their classrooms or be engaged in other activities where they will be supervised by their respective teachers. The children who return consent forms and choose to participate will be administered the survey in appropriate rooms assigned by the principal.

The research assistant/s, will help with handing out the questionnaires and managing the group of students, helping them to settle down. If the researcher has to leave the room to assist a student who may be experiencing difficulty, the research assistant will continue with the administration of the survey. They will also assist students who may have questions that they don’t want to ask in front of the entire group.

After the students complete the survey they will be debriefed using a debriefing script.

**Describe the Data You Will Collect:**
*(what are you collecting, where will it be stored, how will it be stored)*

Participants’ responses will be collected using paper and pencil survey questionnaires. The completed questionnaires will be stored in a locked filing cabinet in a locked room. The responses on the questionnaire will be coded and entered into SPSS, and saved on a password protected storage laptop. The laptop is encrypted and has anti-viral and firewall protection. Only coded data and no identifying information will be included on the final data file.

**Please List all Locations Where the Research Will Take Place:** *(if doing an on-line survey then just state “on-line survey”)*

Trinidad W.I.

**Describe Potential Benefits:**

There are no direct benefits to the participants.

**Describe Potential Risks:** *(If risk of physical, psychological or economic harm may be involved, describe the steps taken to protect participant.)*

Some of the items on the questionnaire may elicit strong emotional reactions from participants. The following procedures will be implemented to protect the participants:

One or two research assistants will provide assistance in the group administration of the survey. If any participants exhibit symptoms of emotional distress during the administration of the questionnaire, they will be provided with psychological first aid by the researcher (who is a counselor) immediately, then taken to the school social worker at the school for immediate attention. The research assistant will continue the
administration of the survey until the researcher returns to complete the administration of the survey.

Participants will be debriefed by the researcher or the social worker in the school after they complete the questionnaire to screen for any strong emotional reactions to the survey. If any of the children experience strong emotional reactions, the collaborating school social worker can provide counseling interventions where needed and the students can be referred to trauma group sessions held at these schools once a week. The school social worker will check-in with the students who participated in the study a week after to assess for any delayed reactions to participation. This will be followed by a final follow-up before the school term ends.

While the questions on the survey do not address child abuse explicitly. If a child volunteers this information to the researcher in the process, the researcher will be bound to inform the principal and social worker about it and must report it to the Trinidad and Tobago Police Service.

Children are assessed by a diagnostic team from the ministry of education (comprised of a psychologist, behavioral analyst, and guidance counselor) as needed, when referred by the school social worker.

---

**Describe How Participant(s) Will Be Recruited:** *(flyers, email solicitation, social media websites, etc.)*

The participants will be recruited from the standards one, two, three and four classes (equivalent to grades two to five in the US) from a cluster of four primary school(s) located in communities from the North Eastern and Port of Spain Police Divisions, which are among the divisions with the highest levels of homicides and gang related crimes. The questionnaire will be administered to all the students within the sample who return completed parental consent forms.

<table>
<thead>
<tr>
<th>Maximum Number of Participants (to be approached with consent)</th>
<th>345</th>
<th>Age Range of Participants:</th>
<th>Children 8-10</th>
<th>Amount of Compensation/course credit:</th>
<th>Gift bag with assorted treats to choose from</th>
</tr>
</thead>
</table>

**Describe the Informed Consent Process.** *(How will informed consent be obtained? Attach a copy of the Informed Consent Document)*

A letter requesting consent will be sent to the parents of all eligible participants. The letter will outline the nature of the study, steps taken to ensure anonymity, and the risks and benefits of the study. A letter of assent will be read to the children before the administration of the questionnaire.

---

**(SIGNATURE SECTION)**

<table>
<thead>
<tr>
<th>Principal Investigator(s) Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

| Co-Investigator(s) Signature(s): | Date: |
### What to include in your protocol submission packet

1. Three copies of the signed protocol [containing signatures of all investigators, supervisor (if PI is graduate student), and department chair]
2. Three copies of the informed consent, flyers, or advertisements, interview questions, surveys)
3. If the protocol is funded by NIH provide one copy of the grant proposal.

The review process usually takes 7 to 10 business days. You will receive an email notification about revisions needed to the protocol. If your study is approved, the approval packet will be mailed to you at the address you indicated on the protocol submission form.

You may check the status of your protocol submission at [http://irb.ufl.edu/webtrack.html](http://irb.ufl.edu/webtrack.html)
Dear Parent/Guardian,

My name is Nadine Isaac and I am a doctoral candidate in the School of Human Development and Organizational Studies in Education at the University of Florida. I would like to invite you to allow your child/children to participate in my doctoral study that will explore how community violence impacts elementary school aged children in communities with high levels of crime in Trinidad and Tobago.

Participation in this study involves some minimal risks. Some of the items in the questionnaire may elicit strong emotional reactions in your child. If your child experiences discomfort, school social workers can provide him or her with help at no cost to you. These results of this study may not directly help your children today, but may benefit future students. With your permission, I would like to ask your child to volunteer for this research. Your child will be asked to answer questions in a questionnaire. The questions should take approximately 50 minutes to complete. Children will not have to answer any question they do not wish to answer.

Your child's identity will be kept confidential to the extent provided by law. Their names will not be recorded on the surveys; code numbers will be used instead, so individual surveys cannot be identified and results will be reported solely in the form of group data. Participation is completely voluntary and non-participation in this study will not affect the child's grades or placement in any school programs. They will be asked questions like, how often have you "heard gun shots and how often have you been "not feeling close to people around you."

You and your child have the right to withdraw consent for your child's participation at any time without consequence. No compensation is offered for your child's participation. However, your child will be given a gift bag with assorted treats and school supplies. Your child's participation will be much appreciated. I will be happy to provide you with a summary of the research results, at your request upon the completion to this study.

Please indicate your consent to participate in my study below. If you have any questions please do not hesitate to contact me at nisaac@ufl.edu or my advisor, Dr. Smith-Adcock, at ssmith@coe.ufl.edu. Questions or concerns about your child's rights as a research participant may be directed to the UFIRB office at (352) 392-0433 or P.O. Box 112250, Gainesville, FL 32611-2250.

Thank you in advance for your support.
Sincerely,

Nadine Isaac, M.A. Doctoral Candidate
School of Human Development and
Organizational Studies in Education
College of Education
University of Florida

Please read the above description, sign below and return.

I have read the procedure described above. I voluntarily give my consent for my child, __________________________, to participate in this study. I have received a copy of this description.

_________________________________________  ___________
Parent / Guardian          Date

_________________________________________  ___________
2nd Parent / Witness       Date

CHILD ASSENT SCRIPTS
Hello class. My name is Ms. Nadine I am a student at the University of Florida. I am trying to learn about how children experience the things that happen in their neighborhood, especially crimes. I would like to ask you to participate in a research study by answering some questions that I have given to you. This will take less than one hour. If you choose to do this, you will write the answers. This is not a test for marks or grades, but there are some questions that may remind you of times you heard about, knew about, or saw crimes happen. If you feel sad or upset by this, let me know so I can make sure someone helps you. You do not have to do this study if you don’t want to and you can stop at any time. Other than the people I work with at the University of Florida, no one will know your answers, not even your teachers or classmates. If you don’t want to, you do not have to answer any of the questions and, if you ask, your answers will not be used in the study. Your [parent / guardian] said it would be OK for you to do this. Would you be willing to answer these questions for me?

DEBRIEFING SCRIPT
Thank you class, for participating in my study today. If any of the questions you answered today made you feel sad or upset, let me know so that I can make sure that someone helps you. If you still feel sad and upset about this after today you can let your teacher or the principal know so you can see the school social worker who will help you.
Please provide the following information:

**I am a (circle one)**
- Boy
- Girl

**Age:**
I am ________ years old.

**Class (Grade) in School:**
I am in standard __________ at school.

**Ethnicity (circle one):**
I am of
a. African descent
b. East Indian descent
c. Mixed (African and Indian)
d. Mixed (Other)
e. Other, specify ______________

**Community of Residence**
I live in ______________ .
a. Community 1
b. Community 2
c. Community 3
d. Community 4
e. Community 5
f. Other, specify_______________________

**I have lived in my community for:**
a. At least one year
b. Less than one year. Please write how long you have lived in your community ___________.
c. More than one year

**Please circle all the persons who live at your home:**
- Mother
- Stepmother
- Father
- Stepfather
- Brother
- Stepbrother
- Sister
- Stepsister
- Grandmother
- Grandfather
- Uncle
- Cousin
(specific)__________________
- Aunt
- Any other

Have you ever been hurt in a crime?

Yes _____  No_____
**Child’s Exposure to Community Violence Checklist**

*Instructions:* Listed below are several kinds of things that happen in a community. You may have seen it happen to someone else, heard it or it may have happened to you during the last 12 months/year. Place an X in the box below to say how often you’ve seen/heard or been present for any of these.

<table>
<thead>
<tr>
<th></th>
<th>Never/don’t know</th>
<th>Once</th>
<th>Twice</th>
<th>3-10 times</th>
<th>More than 10 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Heard gun shots</td>
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<tr>
<td>2. Seen someone arrested</td>
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<tr>
<td>3. Felt safe at home</td>
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<td>4. Seen persons selling drug</td>
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<tr>
<td>5. Seen someone beaten up</td>
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<tr>
<td>6. Heard adults shout at each other</td>
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<tr>
<td>7. Seen someone get stabbed</td>
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<tr>
<td>8. Seen someone get shot</td>
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<td>9. Seen a gun at your home</td>
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<td>10. Felt unsafe when at school</td>
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<td>11. Seen adults hit each other</td>
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<td>12. Felt unsafe outside in neighborhood</td>
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<tr>
<td>13. Seen a dead body in the neighborhood</td>
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<td>14. Seen gangs in neighborhood</td>
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<tr>
<td>15. Seen someone pull a gun on another person</td>
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<tr>
<td>16. Seen someone shot or stabbed</td>
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<td>17. Your house has been broken into</td>
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<td>18. Seen knife pulled on someone</td>
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<td>19. Seen someone stealing from store</td>
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<tr>
<td>20. A non-family member threatened to be beat you up</td>
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<tr>
<td>21. Been beaten by non-family member</td>
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<td>22. Been threatened to be killed</td>
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<tr>
<td>23. Been threatened to be shot or stabbed</td>
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<tr>
<td>24. Been shot or stabbed</td>
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<tr>
<td>25. Hurt someone else really badly</td>
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<td>26. Used a weapon to scare/hurt someone</td>
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<tr>
<td>27. Known someone killed by another person</td>
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<tr>
<td>28. Seen someone killed by another person</td>
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<tr>
<td>29. Been pinched, kicked or locked up by non-family member</td>
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<tr>
<td>30. Other situation that was frightening or made you think you would die</td>
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</tbody>
</table>
The Child PTSD Symptom Scale (CPSS) – Part I

Instructions: Below is a list of problems that kids sometimes have after experiencing an upsetting event. Read each one carefully and circle the number (0-3) that best describes how often that problem has bothered you IN THE LAST 2 WEEKS.

Think about your most distressing event in your mind. Use the memory of this event to answer the following questions.

Length of time since the event:

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all or only at one time</td>
<td>Once a week or less/once in a while</td>
<td>2 to 4 times a week/half the time</td>
<td>5 or more times a week/almost always</td>
</tr>
</tbody>
</table>

1. 0 1 2 3 Having upsetting thoughts or images about the event that came into your head when you didn’t want them to

2. 0 1 2 3 Having bad dreams or nightmares

3. 0 1 2 3 Acting or feeling as if the event was happening again (hearing something or seeing a picture about it and feeling as if I am there again)

4. 0 1 2 3 Feeling upset when you think about it or hear about the event (for example, feeling scared, angry, sad, guilty, etc)

5. 0 1 2 3 Having feelings in your body when you think about or hear about the event (for example, breaking out into a sweat, heart beating fast)

6. 0 1 2 3 Trying not to think about, talk about, or have feelings about the event
<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Not at all or</td>
<td>2</td>
<td>3</td>
<td>Trying to avoid activities, people, or places that remind you of the traumatic event</td>
</tr>
<tr>
<td></td>
<td>only once at</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>one time</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Once a week or</td>
<td>3</td>
<td></td>
<td>Not being able to remember an important part of the upsetting event</td>
</tr>
<tr>
<td></td>
<td>less/once in a</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>while</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2 to 4 times a</td>
<td>0</td>
<td></td>
<td>Having much less interest or doing things you used to do</td>
</tr>
<tr>
<td></td>
<td>week/half the</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
<td>time</td>
<td>2</td>
<td></td>
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<tr>
<td>10</td>
<td>5 or more times a week/always</td>
<td></td>
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<tr>
<td>11</td>
<td>Not being able to have strong feelings (for example, being unable to cry or unable to feel happy)</td>
<td></td>
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<tr>
<td>12</td>
<td>Feeling as if your future plans or hopes will not come through (for example, you will not have a job or getting married or having kids)</td>
<td></td>
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</tr>
<tr>
<td>13</td>
<td>Having trouble falling or staying asleep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Feeling irritable or having fits of anger</td>
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<tr>
<td>15</td>
<td>Having trouble concentrating (for example, losing track of a story on the television, forgetting what you read, not paying attention in class)</td>
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<tr>
<td>16</td>
<td>Being overly careful (for example, checking to see who is around you and what is around you)</td>
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<td></td>
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<tr>
<td>17</td>
<td>Being jumpy or easily startled (for example, when someone walks up behind you)</td>
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</tbody>
</table>
The Child PTSD Symptom Scale (CPSS) – Part 2

Indicate below if the problems you rated in Part 1 have gotten in the way with any of the following areas of your life DURING THE PAST 2 WEEKS.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>19.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>20.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>21.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>22.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>23.</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>24.</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
REFERENCES


Central Bank of Trinidad and Tobago. (2014). *Summary Economic Indicators*.


BIOGRAPHICAL SKETCH

Nadine Isaac was born and raised in Trinidad and Tobago. She grew up in the Morvant community. In 2008 she graduated from the University of the Southern Caribbean, Maracas St. Joseph campus, Trinidad with a Bachelor of Science in behavioral science with an emphasis in psychology. She received her Master of Arts degree in clinical mental health counseling from Andrews University, Berrien Springs Michigan in 2011. She has a passion for working for children and her research interest centers around traumatic stress in children, and multicultural counseling.